Tobacco Situation

Economics, Statistics,
and Cooperatives Service

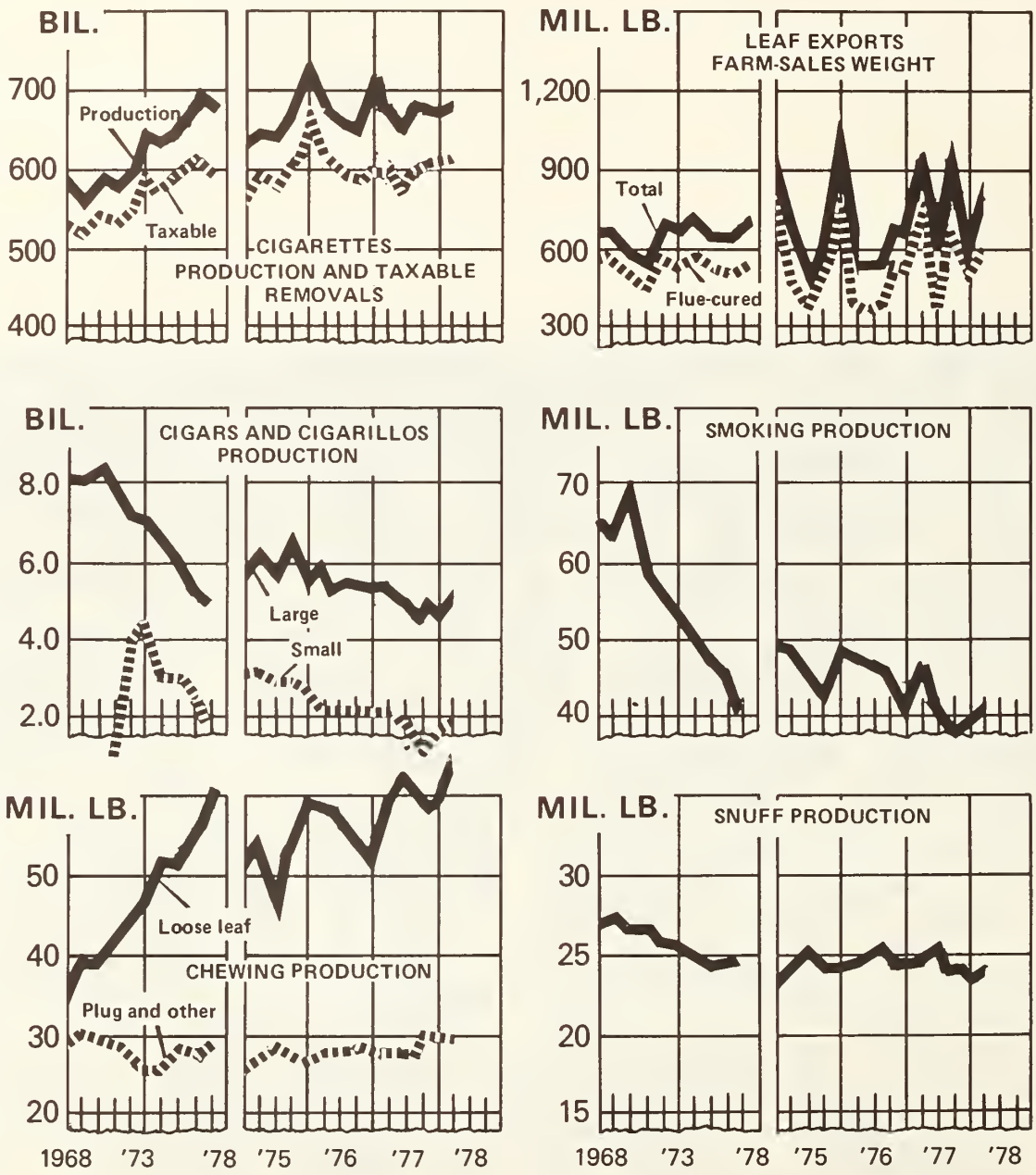
U.S. Department of
Agriculture

TS-163

March
1978

TOBACCO OUTLETS

Trends in Manufactured Products and Exports



USDA

LAST QUARTER SHOWN ESTIMATED.

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THE TOBACCO SITUATION

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SUMMARY

Despite smaller quotas for flue-cured and burley, the 1978 tobacco crop may total close to last year's 1.9 billion pounds, holding the prospective 1978/79 tobacco supply supply near this year's level.

Effective (farm) quotas for 1978 are down 1 percent for both flue-cured and burley. Nevertheless, with the acreage limitation for flue-cured tobacco relaxed, U.S. tobacco growers may increase plantings from the 965,580 acres harvested in 1977. The 1978 flue-cured crop may cost about 5 percent more to produce, primarily because of higher labor costs.

The indicated price support for eligible tobacco is 6.3 percent higher than last year, due to the formula that reflects changes in prices paid by farmers. Also, USDA has changed the restrictions for flue-cured to encourage growers to aim for a larger output of upper stalk tobacco, while cutting down on lower stalk output.

Larger beginning stocks offset a smaller 1977 crop to raise the domestic leaf supply for 1977/78 to 5.4 billion pounds, about the same as the previous year. Domestic use and exports are expected to hold close to the 1977 totals, resulting in a slight increase in October 1 carryover stocks (July 1 for flue-cured).

On January 1, 1978, nonfarm stocks were 3 percent above a year earlier. By the end of this marketing year stocks should total about 1 percent above the beginning level of 3.52 billion pounds.

Cigarette output in 1977 dropped 4 percent below the 1976 record of 693 billion pieces. Cigarette exports and domestic use increased, and inventories were drawn down. Smokeless tobacco products (chewing tobacco and snuff) registered another production gain in 1977. Output of both smoking tobacco and cigars fell below 1976. Similar trends are expected in 1978.

U.S. smokers puffed a record 620 billion cigarettes in 1977, 1 percent more than the previous year. Consumption per adult fell 1 percent to 4,064 cigarettes (203 packs). Total cigarette use could climb further in 1978 as increasing population offsets slightly reduced per capita use. The antismoking campaign announced in January by the HEW Secretary focuses on education and research and may not have much immediate impact on consumption levels; impacts could come from new laws such as higher cigarette taxes.

U.S. tobacco leaf and products exports rose 19 percent in value to a record $1.73 billion in calendar 1977 due to higher prices and higher volume of both unmanufactured and manufactured tobacco exports. Export weight of unmanufactured tobacco totaled 629 million pounds (equivalent to 705 million pounds, farm-sales weight). Exports in 1978 will do well to hold last year's high level.

Unmanufactured tobacco imports (duty paid) increased 2 percent to 316 million pounds last year. A decline in leaf categories was offset by a pickup in scrap imports. Last year's imports accounted for nearly one-fifth of the tobacco used in U.S. cigarette production; a similar proportion is likely this year.

Flue-cured tobacco disappearance in the current marketing year will do well to stay near last year's 1.15 billion pounds. With smaller 1977 crop, carryover in mid-1978 may stay near the 2.07 billion pounds carryin. Flue-cured production in 1978 may equal last year's 1.12 billion pounds. This projection assumes an average crop outturn in relation to the effective quota.

Smaller exports since last fall's dock strike suggest total disappearance of *burley* tobacco in 1977/78 may drop from last year's 617 million pounds. Auction sales that were ending in mid-March indicated 1977/78 season's marketings of around 610 million pounds, 8 percent below 1976. But burley carryover next October 1 may rise from the year-earlier level.

USDA set the 1978 burley marketing quota at 615 million pounds, 3 percent below 1977. The 1978 farm quota, reflecting 1977's undermarketings, totals about 675 million pounds, 8 million pounds below last season's effective quota. Burley production this year may remain around the 1977 levels.

Acreage allotments for fire-cured, dark air-cured, cigar binder, and Ohio cigar filler were set for 1978 at the same levels as last year. Price changes for the 1977 crop ranged from a 12-percent increase for cigar binder to a 40-percent decrease for Kentucky-Tennessee fire-cured.

ORGANIZATIONAL CHANGE

In January, the U.S. Department of Agriculture created a new agency, the Economics, Statistics, and Cooperatives Service (ESCS), by the merger of the Economic Research Service, the Statistical Reporting Service, and the Farmer Cooperative Service.

Some of the key functions of the agency are to:

— Provide economic analysis on domestic and international agricultural supply and demand; on food supplies and prices, and nutrition and labeling; on the production, distribution, and marketing of agricultural products; on the management of natural resources; and on development of rural communities and the welfare of rural people.

— Collect and report statistical information on U.S. agriculture, including estimates of crop and livestock production, and demand and supply.

— Provide research and technical assistance on the economic and marketing aspects of cooperatives.

TOBACCO PRODUCTS

Cigarette Use Edges Ahead

Year-to-year gains were recorded in each quarter of 1977 and domestic consumption of U.S. cigarettes recorded a new high in 1977. This year, total use may continue to increase slightly as a result of the increase in the smoking age population and per capita use changing little.

First half output is expected to rise from the levels of January-June 1977. Output last year decreased 4 percent from the 1976 record level of 693 billion cigarettes as manufacturers decreased inventories built up in 1976 (table 1). Domestic use of U.S. cigarettes increased 1 percent from the previous record set in 1976. Per capita use of persons 18 and over, at 4,064 cigarettes (203 packs of 20), slipped 1 percent below 1976 levels (table 2)—about 7 percent below the 1963 peak of 4,345 (217 packs of 20). As a result of Government and health organization sponsorship, the pace of antismoking efforts picked up in early 1978.

In early March, the annual reports and recommendations, as required by the Public Health Smoking Act of 1969, had not been made to Congress by the Federal Trade Commission (FTC) and the Department of Health, Education, and Welfare (DHEW).

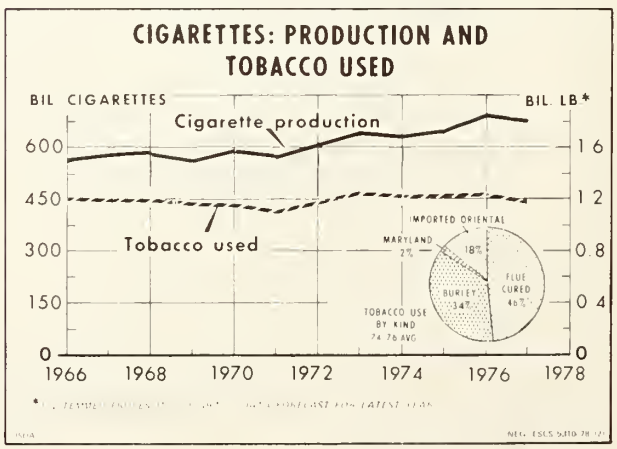


Table 1—Cigarettes: U.S. output, removals, and consumption, 1970-77

Year	Output	Removals					Estimated inventory increase	Total U.S. consumption[3]
		Taxable	Tax-exempt					
			Total	Exports	Shipments[1]	Overseas forces[2]		
	Billions							
1970	583.2	532.8	51.2	29.2	3.7	18.4	14.7	536.5
1971	576.4	528.9	49.2	31.8	2.7	14.7	-11.4	555.1
1972	599.1	551.0	49.0	34.6	2.1	12.3	-3.3	566.8
1973	644.2	590.3	55.9	41.5	2.0	12.4	13.1	589.7
1974	635.0	576.2	59.2	46.9	1.9	10.4	-12.1	599.0
1975	651.2	588.3	62.3	49.9	1.5	10.9	-7.7	607.2
1976	693.4	617.1	72.1	61.4	1.9	8.8	13.5	613.5
1977[4]	665.9	592.0	78.1	66.8	1.1	10.2	-17.5	620.0

[1] To Puerto Rico and other U.S. possessions. [2] Includes ship stores and small tax-exempt categories. [3] Taxable removals, overseas forces, inventory change and imports (negligible). [4] Subject to revision.

Compiled from reports of the Bureau of Alcohol, Tobacco, and Firearms and the Bureau of the Census.

Table 2—Consumption per capita of tobacco products in the United States (including overseas forces), 1968-77

Year	Per capita 18 years and over				Per male 18 years and over			
	Cigarettes[1]		Snuff	All tobacco products[1]	Large cigars and cigarillos		Smoking tobacco[2]	Chewing tobacco[2]
	Number	*Pounds*	*Pounds*	*Pounds*	*Number*	*Pounds*	*Pounds*	*Pounds*
1968	4,186	8.69	.21	10.59	126.5	2.15	1.11	1.05
1969	3,993	8.11	.20	10.04	125.0	2.11	1.08	1.09
1970	3,985	7.77	.19	9.68	125.3	2.08	1.15	1.06
1971	4,037	7.75	.19	9.52	119.2	1.94	1.06	1.09
1972	4,043	7.95	.18	9.65	108.9	1.74	1.00	1.08
1973	4,148	7.92	.18	9.53	102.4	1.61	.88	1.10
1974	4,141	7.90	.18	9.40	91.9	1.47	.87	1.13
1975	4,123	7.73	.17	9.14	82.4	1.32	.76	1.15
1976	4,092	7.27	.17	8.61	75.0	1.20	.75	1.17
1977[3]	4,064	7.07	.16	8.33	67.9	1.09	.65	1.22

[1] Unstemmed processing weight. [2] Finished product weight. [3] Subject to revision.

Filters Continue Increasing

The annual survey of cigarette manufacturers indicated that the share of filter-tip cigarettes rose further in 1977 to 89 percent of total cigarette production—up from 88 percent in 1976. The gain was largely in the 100 millimeter (mm) size that made up 25 percent of the 1977 total output (table 3).

Except for the 100 mm size and the newer 120 mm size, which generally have smaller diameters, filter-type cigarettes have a shorter tobacco column than nonfilter cigarettes. Over the last several years, the filter plugs were lengthened. Also, some standard length brands have smaller diameters. On balance, these factors have enabled manufacturers to reduce tobacco requirements substantially per 1,000 cigarettes. In 1977, U.S. cigarette manufacturers used an estimated 1.3 billion pounds of tobacco (farm sales weight), about 6 percent below 1976.

Since late 1975, major cigarette companies heavily promoted new and existing brands of low-tar and low-nicotine cigarettes. Cigarettes containing 14 milligrams or less of tar account for about 25 percent of the cigarette market. Sales of these high filtration cigarettes are increasing largely by substituting for other types of cigarettes.

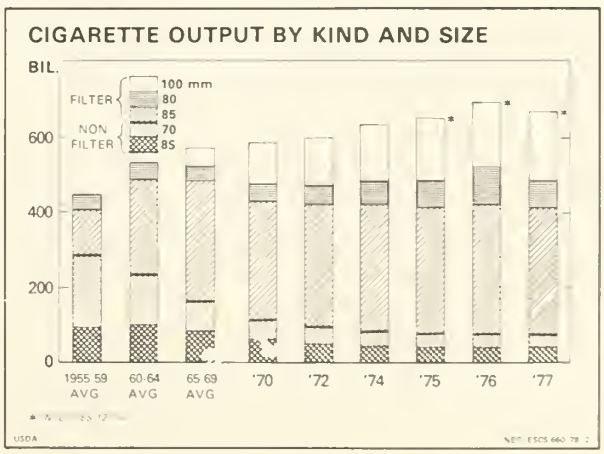
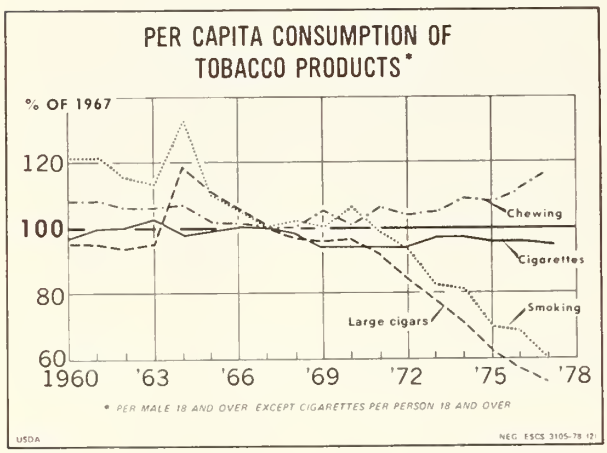


Table 3—Cigarette output of filter-tip and nonfilter-tip by length, 1975-77[1]

Item	1975		1976		1977[2]	
	Output	Percent of total	Output	Percent of total	Output	Percent of total
	Billions	*Percent*	*Billions*	*Percent*	*Billions*	*Percent*
Filter-tip						
70mm Regular	.1	---	---	---	---	---
80 mm Long	69.4	10.4	82.7	11.9	70.0	10.5
85 mm King	355.4	51.7	356.3	51.4	344.4	51.7
100 mm Extra long	157.6	24.2	161.6	23.3	169.6	25.5
120 mm	9.4	1.4	13.0	1.9	11.3	1.7
Total	570.8	87.7	613.6	88.5	595.5	89.4
Nonfilter-tip						
70 mm Regular	36.2	5.5	34.8	5.0	30.5	4.6
85 mm King	44.1	6.8	45.0	6.5	39.9	6.0
Total	80.3	12.3	79.8	11.5	70.4	10.6
Grand total	651.2	100.0	100.0	100.0	665.9	100.0

[1] Cigarettes having other lengths were included in the most nearly comparable group. [2] Preliminary.



Cigarette Prices Rising

Last year the average price of cigarettes rose 4.8 percent. For all consumer items, the gain in the Bureau of Labor Statistics (BLS) index was 6.4 percent. This year a further rise is expected for cigarettes due to higher costs of tobacco and other raw materials.

Four States raised cigarette taxes last year. State cigarette tax rates (weighted by number of packs taxed) averaged nearly 13 cents per pack in December 1977, slightly higher than a year earlier. Excise tax increases are proposed this year in a few States. The Federal excise tax is 8 cents a pack. In addition, many local Governments tax cigarettes.

U.S. exports of cigarettes in 1977 rose 9 percent in volume to another record. The declared value rose to $615 million, up 21 percent, reflecting an increase in both unit value and quantity. Despite rising prices, U.S. manufacturers have developed an expanding overseas demand for their cigarettes by applying many of the marketing techniques they have successfully used in this country (tables 4, 5, and 6).

HEW Launches Drive Against Cigarette Smoking

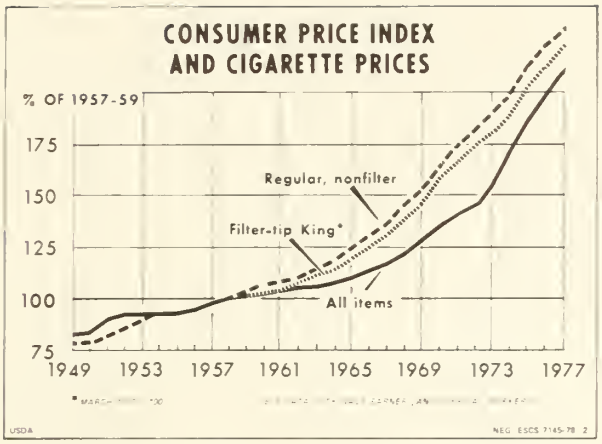
In January the Secretary of the U.S. Department of Health, Education and Welfare (DHEW) launched a new program of health education, regulation, and research designed to discourage cigarette use. The following actions were proposed: (1) Increase public information and education about smoking; (2) urge States that do

Table 4—U.S. cigarette exports to leading destinations, 1975-77

Country	1975	1976	1977[1]
	Billions		
Belgium-Luxembourg	7.5	12.1	11.6
Hong Kong	4.4	5.9	5.6
Netherlands Antilles	3.9	4.1	4.1
Japan	3.5	2.2	3.3
Iran	3.1	5.8	8.2
Saudi Arabia	2.3	2.4	3.5
Spain	2.0	3.4	4.3
Federal Republic of Germany	.8	2.3	2.4
Kuwait	1.9	2.2	1.6
United Arab Emirates	1.7	1.6	1.2
Canary Islands	1.3	1.1	1.8
Syria	1.2	2.1	.7
Lebanon	1.0	.7	1.9
Panama	.9	1.1	1.3
Other countries	14.7	14.4	15.3
Total	50.2	61.4	66.8

[1] Subject to revision.

Compiled from publications and records of the Bureau of the Census.



not have laws regulating smoking in public places (22 States) to enact such laws; (3) reexamine Federal cigarette Federal cigarette tax policies; (4) encourage school-age young people and various high risk groups not to smoke; (5) cooperate with the Federal Trade Commission in developing a stronger warning label on packages and advertising; (6) work with General Services Administration to strengthen antismoking habits. The HEW Secretary further proposed to expand the chief Government office on smoking and health. Most of the proposals had been previously made by public agencies or voluntary organizations.

The Federal cigarette excise tax has remained unchanged since 1951. An increased tax, or a graduated levy based on tar and nicotine content, could have a

Table 5—Wholesale cigarette price revisions, 1968-77[1] [2]

Approximate date of change	Net price per 1,000				Net price per 1,000, excluding Federal excise tax			
	Standard	King size	Filter tips	100 millimeter	Standard	King size	Filter tips	100 millimeter
	Dollars							
November 1968	9.45	9.45	9.45	9.95	5.45	5.45	5.45	5.95
May 1969	9.80	9.80	9.80	10.30	5.80	5.80	5.80	6.30
May 1970	10.25	10.25	10.25	10.75	6.25	6.25	6.25	6.75
February-March 1973	(10.45-10.60)	(10.45-10.60)	(10.45-10.60)	(10.95-11.10)	(6.45-6.60)	(6.45-6.60)	(6.45-6.60)	(6.95-7.10)
January 1974	10.60	10.60	10.60	11.10	6.60	6.60	6.60	7.10
May 1974	11.30	11.30	11.30	11.80	7.30	7.30	7.30	7.80
November 1974	(11.80-12.00)	(11.80-12.00)	(11.80-12.00)	(12.30-12.50)	(7.80-8.00)	(7.80-8.00)	(7.80-8.00)	(8.30-8.50)
November 1975	(12.55-12.75)	(12.55-13.25)	(12.55-12.75)	(13.05-13.25)	(8.55-8.75)	(8.55-8.75)	(8.55-8.75)	(9.05-9.25)
October 1976	13.50	13.50	13.50	14.00	9.50	9.50	9.50	10.00
August 1977	14.35	14.35	14.35	14.85	10.35	10.35	10.35	10.85

[1] Includes leading brands. A 3¼ percent discount is made for payment within 10 days or 2 percent within 14 days. [2] For 1943-63 see TS-151, March 1975.

Table 6—Tobacco demand factors, 1968-77

Year	Population July 1[1]	Disposable personal income, per capita[2]		Consumer price indexes				
		Current prices	1972 prices	All items	Tobacco products	Cigarettes		Cigars, regular size
						Nonfilter tip, regular	Filtertip, king size	
	Million	*Dollars*		*1967=100*				
1968	130.4	2,930	3,464	104.2	106.3	106.9	106.4	101.3
1969	132.5	3.111	3,515	109.8	111.9	112.7	112.3	104.3
1970	135.2	3,348	3,619	116.3	122.2	122.4	122.5	105.4
1971	137.5	3,588	3,714	121.3	126.4	127.9	128.1	107.1
1972	139.8	3,837	3,837	125.3	133.4	134.8	135.4	110.8
1973	142.2	4,285	4,062	133.1	137.0	138.7	139.1	112.9
1974	144.7	4,369	3,968	147.7	143.8	145.5	145.9	119.5
1975	147.3	5,062	4,007	161.2	153.9	156.0	156.5	124.2
1976	149.9	5,511	4,137	170.5	160.5	162.7	163.2	129.9
1977[3]	152.6	6,035	4,290	181.5	168.0	170.6	171.0	135.0

[1] 18 years and older including forces overseas. [2] Based on total population. [3] Subject to revision.

Table 7—Cigars and smoking tobacco: U.S. output, removals, and consumption, 1970-77

Year and item	United States factories			From Puerto Rico taxable	Imports	Exports	Total U.S. consumption[1]
	Output	Removals					
		Taxable	Tax-exempt				
	Millions						
Large cigars[2]							
1970	7,094	6,706	152	1,259	46	54	8,108
1971	6,707	6,506	131	1,222	48	46	7,861
1972	6,025	5,896	139	1,272	62	75	7,294
1973	5,655	5,554	143	1,304	75	107	6,969
1974	5,284	5,008	136	1,224	74	86	6,356
1975	4,524	4,476	125	1,216	79	92	5,804
1976	4,178	4,040	144	1,225	88	124	5,363
1977[3]	3,927	3,754	130	[4]1,093	92	117	4,952
	Million pounds						
Smoking tobacco							
1970	69.4	65.6	1.5	---	8.4	.9	74.6
1971	60.5	61.3	1.4	---	8.4	1.2	69.9
1972	55.9	55.1	1.3	---	11.9	1.1	67.2
1973	53.0	51.7	1.5	---	8.0	1.2	60.0
1974	49.0	49.0	1.0	---	10.9	.9	60.0
1975	46.2	45.6	1.0	---	8.7	1.6	53.7
1976	44.6	43.7	.9	---	[5]9.9	.8	53.7
1977[3]	40.7	40.2	.7	---	[5]7.2	.8	47.3

[1] Total removals (or sales) from U.S. and Puerto Rico, factories plus imports, minus exports. [2] Includes cigarillos. [3] Subject to revision. [4] Estimated. [5] From European countries. Excludes leaf exporting countries normally not suppliers of packaged tobacco.

Compiled from reports of the Bureau of Alcohol, Tobacco, and Firearms, Bureau of the Census, and Agricultural Marketing Service, USDA.

substantial impact on the industry. Any change in excise taxes requires new legislation.

Cigar Use Again Lower in 1977

Large cigar use (including cigarillos) continued to decline in the fourth quarter of 1977. Last year, U.S. smokers used about 5 billion large cigars, 8 percent less than in 1976 (table 7). The BLS index of retail cigar prices rose 4 percent last year. The decline in cigar use over the past several years suggests this trend will continue.

Last year's decline in use was in cigars retailing for 12 cents a piece or less. Sales of the higher priced cigars continued the gain of recent years (table 8).

Production of *small cigars* (not over 3 pounds per 1,000) declined to 1.86 billion pieces in 1977. The total was off 17 percent from 1976 and represented less than one-half of the 1973 record. By the fourth quarter of 1977, output had slipped to around a 1.65 billion annual rate. The sales decline for small cigars coincides with the ban on broadcast advertising.

Smoking Tobacco Use Falls

Smoking tobacco production last year totaled nearly 41 million pounds, 9 percent below the 1976 level. Sales of both pipe and roll-your-own tobacco declined (table 9). Estimated U.S. use of smoking tobacco amounted to

Table 8—Large cigars: Taxable removals by revenue class, 1976/77

Revenue class and wholesale prices[1]	1976	1977	Change from 1976
	Billions		*Percent*
A-C (up to $66)	2.79		
D-E (over $66 to $120)	1.56		
F-H (over $120)	1.01		
Total removals	5.35		

[1] Wholesale price classes roughly equivalent to retail price classes used prior to February 1, 1977. [2] Computed from unrounded data. Compiled from reports of the Bureau of Alcohol, Tobacco and Firearms, and Cigar Association of America, Inc.

Table 9—Tobacco products: Output and domestic sales, 1975-77

Item	Manufactured			Invoiced to domestic customers[1]		
	1975	1976	1977[2]	1975	1976	1977[2]
	Million pounds					
Chewing tobacco						
Plug	18.1	16.7	16.4	17.6	16.9	16.3
Twist	2.3	2.3	2.2	2.3	2.3	2.2
Fine-cut	7.3	8.4	10.1	7.2	8.7	10.0
Loose leaf	53.7	56.3	61.3	53.6	56.1	60.2
Total	81.5	83.7	90.0	80.6	84.0	88.7
Snuff	24.4	24.8	24.6	25.2	25.8	24.4
Smoking tobacco (packages)	46.1	44.6	40.7	45.6	43.7	40.2
Pipe	39.6	38.8	35.8	38.9	37.9	35.2
Granulated or sack	.5	.4	.4	.5	.4	.4
Smoking tobacco in bulk (exports)	17.6	13.9	9.8	—	—	—
Small cigars (Millions)	2,942	2,246	1,864	2,891	2,161	1,850

[1] Taxable removals for small cigars. [2] Subject to revision.

Basic data compiled from reports of the Bureau of Alcohol, Tobacco, and Firearms, Bureau of the Census, and Agricultural Marketing Service, USDA.

Table 10—Estimated number of roll-your-own cigarettes smoked and smoking tobacco consumed, 1972-77

Year	Roll-your-own cigarettes[1]	Smoking tobacco consumption				
		Total[2]	Used for—			
			Roll-your-own cigarettes		Pipe tobacco	
			Quantity	Percent of total	Quantity	Percent of total
	Billions	*Million pounds*	*Million pounds*	*Percent*	*Million pounds*	*Percent*
1972	8.7	67	16	23	51	77
1973	9.8	60	18	29	42	71
1974	8.5	60	15	25	45	75
1975	6.6	54	12	22	42	78
1976	6.9	54	12	23	42	77
1977[3]	3.0	47	7	15	40	85

[1] Derived from shipments of cigarette papers and tubes. [2] Includes imported tobacco. [3] Preliminary.

Data for 1970-73 are revised.

47 million pounds, about 12 percent below 1976. Both domestic sales and imports were lower. This year, sales will do well to hold their own.

The number of roll-your-own tobacco cigarettes smoked declined further in 1977. Roll-your-own tobacco cigarettes accounted for about 15 percent of U.S. smoking tobacco use. Beside cigarette cut and granulated and sack tobacco, a portion of manufacturers' pipe tobacco sales was used in roll-your-own cigarettes (table 10).

Smokeless Tobacco Output Gains

The 8-percent gain that manufacturers recorded in 1977 production of *chewing tobacco* more than offset the 1-percent decline in *snuff* output and brought the total to the highest level since 1956. Of the chewing tobacco categories, fine-cut and loose-leaf output increased, while plug and twist declined.

Manufacturers sell virtually all their chewing tobacco and snuff domestically. Domestic chewing sales last year increased 6 percent and were the highest since 1948. The gain was for fine-cut and loose leaf. Snuff sales dropped last year and plug sales continued their decline.

Table 11—Tobacco: Government program exports to leading 1975-77

Country	1975[1]	1976	1977[2]
	Million pounds		
	CCC credit sales		
United Kingdom	20.2	7.6	3.9
Egypt	7.7	—	—
Malaysia	6.0	—	—
Australia	3.7	2.1	3.5
Zaire	—	1.1	—
Ireland	3.7	2.9	3.2
Philippines	3.4	12.7	9.2
Thailand	—	—	4.6
New Zealand	—	2.6	3.3
Poland	—	2.4	4.3
	Dollar credit		
Egypt	—	12.4	5.3
Syria	—	2.6	1.2
Zaire	—	—	3.0
Philippines	—	—	2.9
Portugal	—	—	1.0

[1] Foreign currency sales of 1.9 million pounds to South Vietnam in 1975. [2] Subject to revision.

Compiled from records of Foreign Agricultural Service.

U.S. EXPORTS AND IMPORTS

The United States is the world's leading tobacco exporter and the third largest importer. In 1960-64, about 30 percent of the U.S. tobacco crop was exported. Recently, our exports represented about one-third of the U.S. tobacco crop and about 25 percent of world tobacco exports. U.S. exports of tobacco and products were valued at a record $1,732 million in calendar year 1977, $274 million more than the previous record in

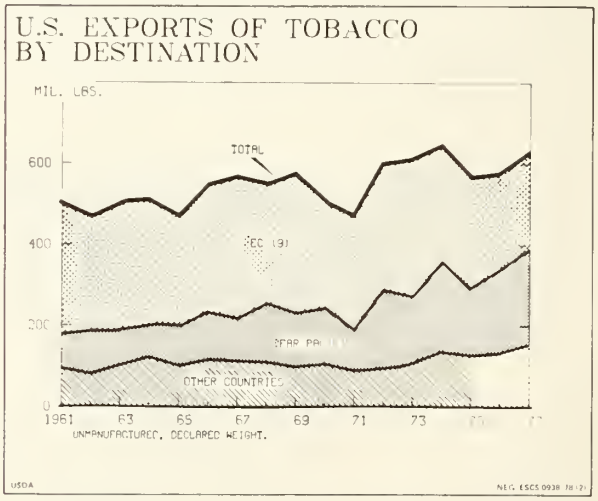


Table 12—U.S. bulk smoking tobacco exports to leading destinations, 1975-77[1]

Country	1975	1976	1977[1]
	Million pounds		
Canary Islands	.1	(2)	1.1
Iran	.4	4.5	4.9
Dominican Republic	2.7	1.6	0
Switzerland	5.3	2.1	.4
Netherlands	.3	(2)	(2)
Spain	1.7	1.3	.1
Fed. Rep. of Germany	.6	.8	1.0
Ecuador	.8	.8	.7
Finland	1.3	(2)	(2)
Australia	.5	(2)	(2)
Other countries	3.9	2.8	1.6
Total	17.6	13.9	9.8

[1] Subject to revision. [2] Less than 50,000 pounds.

Compiled from publications and records of the Bureau of the Census.

1976. This includes unmanufactured tobacco worth $1,094 million and tobacco products of $637 million. When $365 million of imports (arrivals) are deducted, the surplus was a record $1-1/3 billion.

December Surge Pushes Leaf Tobacco Exports Ahead

Aided by a record-high amount for a single month, 1977 exports of U.S. unmanufactured tobacco gained 9

percent to 630 million pounds (285 thousand metric tons) in export weight. In farm-sales weight the quantity reached 705 million pounds, just under the high level of 1974 (713 mil. lbs.).

Exports of burley leaf set a calendar year record. Exports of flue-cured tobacco increased but remained below the high levels of 1972-74 (table 13).

Last year the Commodity Credit Corporation (CCC) provided credit on 33 million pounds of commercial exports. Financing was authorized up to 36 months. Public Law 480 shipments accounted for a major share of Egypt and Zaire's takings. The barter program remained inactive (table 14).

Japan Again Is Number One Market

A large part of Japan's purchases from the 1977 crop moved overseas in December after the October-November dock strike ended, keeping Japan as the

Table 13—United States exports of unmanufactured tobacco by types and to principal importing countries, 1973-77

(Declared weight)

Type and country	Average 1969-73	1974	1975	1976	1977[1]	1977 as a percentage of 1976
	Million pounds					*Percent*
Type:						
Flue-cured	396.6	440.9	391.4	378.7	410.1	108
Burley	48.5	60.8	61.9	67.9	79.1	117
Maryland	10.4	10.9	4.1	8.3	7.7	93
Fire-cured, Ky. and Tenn.	21.4	19.4	14.9	16.3	19.1	117
Virginia fire and sun-cured	4.0	6.0	3.3	2.9	5.3	183
Green River and One Sucker	.7	1.0	.3	.3	.1	33
Black Fat	2.5	2.7	3.5	3.3	2.7	82
Cigar wrapper	2.3	2.9	4.3	3.8	4.1	108
Cigar binder	.3	.1	.2	.3	.2	67
Cigar filler	.4	.6	.2	.4	.3	75
Perique	.2	.2	.1	.1	.1	100
Stems, trimmings and scrap	68.6	105.9	78.9	95.8	99.9	104
Total	555.9	651.4	563.0	578.1	628.6	109
Country of destination:						
United Kingdom	110.8	94.3	78.5	71.8	46.8	65
France	8.4	8.2	9.5	8.3	6.2	75
Belgium-Luxembourg	15.0	14.4	8.1	7.5	10.4	139
Netherlands	28.4	31.0	29.9	24.7	30.5	123
West Germany	98.7	97.1	91.0	73.7	78.9	107
Denmark	22.3	12.6	16.4	9.0	16.9	188
Ireland	10.6	10.2	8.2	7.7	5.4	70
Italy	16.8	24.3	31.5	33.2	40.6	122
Total EC	311.1	292.1	273.1	235.9	235.8	100
Switzerland	24.8	21.3	25.9	24.3	28.8	119
Finland	5.4	4.0	8.0	6.2	5.3	85
Norway	6.5	5.4	5.6	5.5	6.0	109
Sweden	17.1	14.5	15.3	14.1	11.8	84
Spain	4.2	8.0	9.4	4.7	5.1	109
Thailand	20.5	20.6	18.7	21.8	16.0	73
South Vietnam	14.5	13.7	1.9	0	0	0
Malaysia	10.0	11.9	7.1	7.3	12.2	167
Philippines	8.1	11.2	11.8	13.0	15.4	118
Taiwan	11.6	23.8	16.0	12.3	20.6	167
Japan	56.9	109.6	81.5	132.7	135.4	102
Australia	14.0	18.7	15.5	10.3	14.2	138
New Zealand	4.2	4.8	5.0	4.9	5.0	102
Egypt	1.5	12.3	10.4	11.1	26.7	241
Other countries	45.5	79.5	57.8	74.0	90.4	122
Total	555.9	651.4	563.0	578.1	628.6	109

[1] Preliminary.

Detail may not add to total due to rounding.

Compiled from publications and records of the Bureau of the Census.

Table 14— Exports of unmanufactured tobacco under Government-financed programs and commercial sales, 1970-77[1]

Calendar year	Government financed exports				Commercial exports				Total unmanufactured tobacco exports
	Title I, P.L. 480		Mutual Security and A.I.D.	Total	Barter	Dollar sales		Total	
	Foreign currency sales	Long-term dollar credit sales				CCC short term credit	Other		
	Quantity (export weight)								
	Million pounds								
1970	12.6	10.4	---	23.0	122.8	58.6	306.0	487.4	510.4
1971	19.3	1.2	---	20.5	143.0	51.3	258.5	452.8	473.3
1972	24.4	2.6	---	27.0	207.4	40.0	331.7	579.1	606.1
1973	21.3	.7	---	22.0	119.4	11.3	459.8	590.5	612.5
1974	21.7	7.5	---	29.2	5.9	28.2	668.1	622.2	651.4
1975	1.9	---	---	1.9	---	49.9	511.2	561.1	563.0
1976	---	15.0	---	15.0	---	32.8	530.5	563.3	578.3
1977[2]	---	13.7	---	13.7	---	33.2	581.7	614.9	628.6
	Value								
	Million dollars								
1970	13.1	8.8	---	21.9	130.2	63.4	273.0	466.6	488.5
1971	19.0	1.4	---	20.4	155.3	54.6	231.7	441.6	462.0
1972	25.3	3.0	---	28.3	243.3	42.5	324.7	610.5	638.8
1973	24.3	.7	---	25.0	144.4	12.1	499.3	655.8	680.8
1974	27.4	9.5	---	36.9	6.8	40.4	748.0	795.2	832.1
1975	2.6	---	---		2.6	73.3	775.9	840.2	851.8
1976	---	25.1	---	25.1	---	58.1	838.4	896.5	921.6
1977[2]	---	56.1	---	56.1	---	64.0	974.2	1,038.2	1,094.3

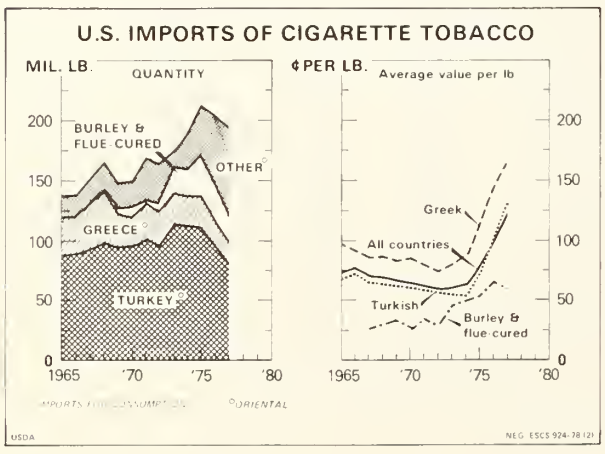
[1] For 1960-69 data, see TS-155, March 1976. [2] Subject to revision.

leading export destination for U.S. tobacco. West Germany and the United Kingdom remained in second and third place, respectively.

High tobacco taxes and slow economic growth in both West Germany and the United Kingdom hold down the takings by those markets. Manufacturers in European Community (EC) countries have preferential access to large supplies from the former overseas territories of EC countries and from less developed countries. Still, the increase in sales of American blend cigarettes containing U.S. leaf has meant several destinations such as Netherlands, Switzerland, Italy, Philippines, Taiwan, and Korea took more U.S. leaf. Following a sizable drop in 1976, overall EC takings stabilized last year.

Flue-cured exports made up about three-fourths of the total U.S. volume, and were up 9 percent. European countries imported about the same level and Japan's shipments were up slightly. Several countries in Asia and Africa jumped their takings sharply.

The 17-percent surge in burley exports reflected gains in takings by most destinations, including the EC. Switzerland, Italy, and West Germany each took more burley than a year earlier. Fire-cured tobacco exports, which increased sharply, go mainly to the Netherlands.



Imports For Consumption Increase

Imports of unmanufactured tobacco *for consumption* (withdrawals from bond and duty-paid releases for manufacture immediately upon arrival) increased slightly. The total—316 million pounds—was up 2 percent from 1976 (table 15). Among major classes, both cigarette and cigar leaf were down; scrap gained substantially.

Cigarette scrap imports were large, but leaf imports, mostly Oriental tobacco, declined in part due to lower cigarette output. Turkey, Greece, and Yugoslavia were principal suppliers. Flue-cured and burley leaf were down 6 million pounds from 30 million pounds last year. The flue-cured and burley leaf imports were valued at 60 cents per pound and the Oriental leaf was

valued at $1.27 a pound. Imports accounted for about 18 percent of the tobacco used in U.S. cigarette production, and a similar high proportion is likely this year.

General imports of tobacco (direct entry plus placements in bonded warehouses for later factory use) dropped 12 percent. Flue-cured and burley leaf and scrap imports (largely cigarette tobacco) increased. Oriental leaf imports have dropped due to higher prices,

Table 15—U.S. imports of unmanufactured tobacco for consumption and general, principal categories, and countries of origin, 1975-77

(Declared weight)

Classification and country of origin	Imports for consumption				General imports (arrivals)			
	1975	1976	1977[1]	1977 as a percentage of 1976	1975	1976	1977[1]	1977 as a percentage of 1976
	Million pounds			*Percent*	*Million pounds*			*Percent*
Cigarette tobacco:								
Leaf, unstemmed:								
Oriental								
Turkey	111.4	94.0	87.2	93	69.6	95.2	56.7	60
Greece	26.5	21.6	16.1	75	18.8	23.3	24.9	107
Yugoslavia	13.4	17.1	13.8	81	15.6	17.3	14.1	82
Lebanon	9.2	9.9	6.5	66	10.9	0	7.6	---
Other countries[2]	15.0	32.0	18.2	57	54.7	50.1	34.6	69
Flue-cured and burley[3]	36.4	30.2	23.7	78	79.9	46.5	50.9	110
Flue-cured	---	---	[3] 5.2	---	---	---	[3] 20.3	---
Burley	---	---	[3] 18.5	---	---	---	[3] 30.6	---
Subtotal	211.9	204.8	194.1	95	249.5	232.4	188.8	81
Scrap								
Turkey	5.8	5.0	6.4	128	8.5	4.0	9.5	238
Mexico	5.8	4.0	5.8	145	2.3	1.5	3.5	233
Other countries[2]	12.2	16.1	20.9	130	21.5	27.9	27.5	99
Subtotal	23.8	25.1	32.1	128	32.3	33.4	40.5	121
TOTAL	235.7	229.9	226.2	98	281.8	265.8	229.3	86
Cigar tobacco:								
Wrapper	1.5	1.6	1.7	106	2.4	2.7	2.2	81
Filler-stemmed and unstemmed								
Dominican Republic	2.0	2.2	1.0	45	12.5	9.7	5.7	59
Other countries	11.5	7.1	4.9	69	24.8	18.8	19.9	106
Subtotal	15.0	10.9	7.6	70	39.7	31.2	27.8	89
Scrap								
Philippine Republic	13.5	15.6	13.3	85	16.6	12.7	7.4	58
Colombia	5.0	2.8	3.7	132	2.4	1.5	3.2	213
Dominican Republic	9.2	7.8	7.5	96	2.0	1.9	.5	26
Brazil	11.4	14.6	25.3	174	3.3	10.2	13.0	127
Other countries	21.2	18.1	25.5	141	25.8	15.2	18.1	119
Subtotal	60.3	58.9	75.3	128	50.1	41.5	42.2	102
TOTAL	75.3	69.8	82.9	119	89.8	72.7	70.0	96
Stems	9.3	10.7	7.1	66	9.6	10.8	7.2	67
Grand total	320.3	310.4	316.2	102	381.1	349.1	306.5	88

[1] Preliminary. [2] Canada, Yugoslavia, Greece, Cyprus, Syria, Lebanon, India, Thailand, Korea, Angola, Mozambique, Zambia, and Malawi. [3] 1977 data reported separately

Detail may not add to total due to rounding.

Compiled from publications and records of the Bureau of the Census.

and imports of cigar tobacco are held down by the declining cigar market.

Since tobacco arrivals were exceeded by imports for consumption, smaller stocks of imported tobacco were held in the United States on January 1, 1978. The decline for cigarette tobacco was 26 million pounds or about 6 percent below a year earlier. The drop was largely in Oriental leaf.

TOBACCO LEAF SITUATION AND OUTLOOK

HIGHLIGHTS

In 1977/78, a larger carryover offset a smaller crop, holding the supply of domestic leaf tobacco to 5.4 billion pounds, about the same as the previous year. By January 1, nonfarm leaf stocks had increased 3 percent over the year-earlier level. By mid-1978, at the end of the current marketing year, stocks may total about the beginning level of 3.5 billion pounds. With almost the same sized flue-cured and burley quotas this year, and slightly smaller last year's 1.9 billion pounds (table 16).

All tobacco types except Maryland, Pennsylvania filler, Connecticut binder (types 51-52), shade-grown cigar wrapper, and Perique are under quotas. Acreage allotments are about the same as last year for Virginia and Kentucky-Tennessee fire-cured, dark air-cured, sun-cured, and cigar filler and binder (types 42-44 and 53-55).

USDA's Crop Reporting Board will publish on April 13 growers' intentions (as of April 1) for tobacco

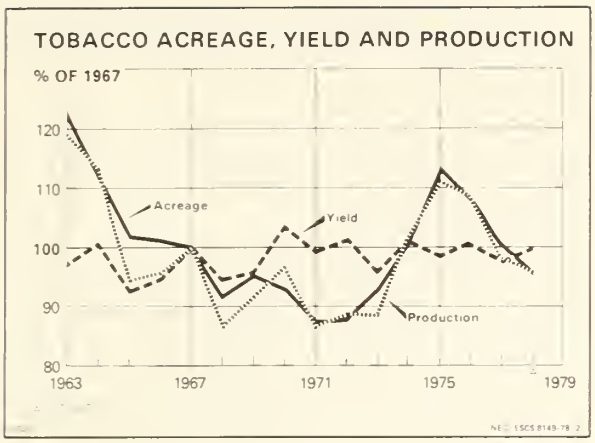
[1] All quantities in this section are farm-sales weight equivalent unless otherwise noted.

Table 16—Flue-cured and burley tobacco: Marketing quota and marketings, 1965-78

Year	Quota		Marketings				Net Carryover[2]
	Basic	Effective	Actual	Over-quota	Under-quota	Effective under quota[1]	
	Million pounds						
	Flue-cured, types 11-14						
1965	1,126.0	1,124.4	1,055.5	27.1	96.0	91.2	64.0
1966	1,135.0	1,199.0	1,107.9	35.0	126.1	111.1	76.1
1967	1,126.3	1,202.4	1,247.5	77.9	30.8	18.4	-59.5
1968	1,127.5	1,067.9	996.4	26.5	96.6	86.1	59.6
1969	1,127.4	1,187.0	1,052.1	26.6	157.9	145.9	119.3
1970	1,071.5	1,190.8	1,178.2	65.1	71.2	63.4	-1.7
1971	1,071.6	1,069.9	1,076.3	60.4	49.9	45.8	-14.5
1972	1,071.2	1,056.7	1,022.1	41.2	72.9	68.1	26.8
1973	1,178.7	1,205.6	1,159.0	54.8	100.5	95.3	40.5
1974	1,296.6	1,337.1	1,245.3	50.0	138.9	132.4	82.5
1975	1,491.4	1,572.3	1,414.6	50.9	203.2	192.3	141.0
1976	1,268.1	1,409.1	1,316.0	49.4	139.9	130.2	80.8
1977	1,116.5	1,197.3	[3]1,124.4	42.6	115.2	110.7	[3]68.1
1978	[3]1,116.4	[3]1,184.5					
	Burley, type 31						
1971	555.1	553.0	471.5	9.7	91.1	89.7	80.1
1972	531.5	611.5	588.6	30.7	45.7	44.6	13.9
1973	559.7	573.6	460.7	11.3	113.1	111.7	100.3
1974	606.5	706.8	610.4	23.0	118.9	104.0	81.0
1975	669.5	750.4	639.9	21.8	127.5	113.4	91.6
1976	634.8	726.4	663.6	33.1	96.2	82.5	9.4
1977[3]	634.3	683.7	[4]610.0	[4]27.2	[4]102.0	[4]87.2	[4]60.0
1978[3]	615.0	[4]675.0					

[1] Under quota marketing less ineligible carryover. [2] Effective under quota marketings less over quota marketings. [3] Preliminary. [4] Estimated.

Compiled from records and reports of Price Support and Loan Division, ASCS.



acreage. During the past 5 years, the spring intentions averaged 1 percent less than the harvested acreage of all tobacco finally reported.

Production Costs Higher

For the 1978 crop year, tobacco production costs are expected to increase again primarily due to higher wage rates. Interest rates, along with machinery and equipment prices, also have increased. Some increases are expected for electricity, gas, and curing fuel costs. Fertilizer, herbicides, insecticides, and other chemicals are in adequate supply at prices near last season's levels.

As a result of an increase in 1978 wage rates similar to recent trend (8 percent annually) and higher prices of other inputs previously mentioned, the 1978 flue-cured tobacco crop will probably cost around 3 to 4 cents more per pound to produce than in 1977.

1978 Price Support Program

The 1978 price support program for tobacco is expected to be similar to that of previous years. Price support is made available to eligible producers through nonrecourse loans to producer associations. To receive price supports, tobacco producers must certify that they did not use DDT, TDE, toxaphene, or endrin insecticides. As a condition for price support for flue-cured tobacco since 1974, USDA requires growers to designate a warehouse where they intend to sell their tobacco (table 17). USDA will continue to enforce the acreage allotments for flue-cured tobacco. The new program to reduce production of less desirable, lower leaves is discussed on page 19. Leasing regulations that limit leasing after June 14 remain unchanged.

Support prices for the 1978 crop are up 6.3 percent over 1977 as required by the formula provisions of the law. This increase reflects higher prices for goods and services bought by farmers during the past 3 calendar years (1975-1977), compared with 1959 average prices paid. Grade loan rates are announced before the marketing season opens (table 18).

Table 17—Flue-cured tobacco: Redesignation summary, 1975-77 seasons

Category	1975	1976	1977
	Million pounds		
Voluntary	124.0	81.4	73.0
Quota transfer	34.2	42.8	23.7
Warehouse sales close	4.4	6.5	9.2
Other	1.9	2.4	3.1
Total	164.5	133.1	109.0

Compiled from the records of Program Operations Division, ASCS.

Table 18—Computations of price support level adjustment factor for tobacco, 1960-78

Crop year	Parity index[1]		Price support level adjustment factor[3]
	Previous calendar year	3-year average[2]	
	1910-14=100		*1959=100*
1960	298	293	([4])
1961	300	297	100
1962	302	300	101
1963	307	303	102
1964	312	307	103
1965	313	311	104
1966	322	316	106
1967	335	323	108
1968	341	333	111
1969	349	342	115
1970	366	352	120
1971	382	366	125
1972	407	385	131
1973	425	405	138
1974	490	441	150
1975	564	493	168
1976	614	556	191
1977	653	610	205
1978	687	650	218

[1] Index of prices paid by farmers, including wage rates, interest and taxes. 1965-75 revised in 1976 using 1971-73 weights. For original data used for prior years calculations see TS-155, March 1976., p. 16. [2] 3 calendar years immediately preceding. [3] 3-year average parity index divided by 1959 parity index. [4] Act of February 20, 1960 set price support at the 1959 level.

Growers of cigar binder and Ohio filler tobacco approved marketing quotas; therefore, price support will be available for their 1978, 1979, and 1980 crops. Growers of flue-cured, burley, fire-cured, dark air-cured and sun-cured tobaccos approved in previous referendums marketing quotas applicable to the 1978 crop. However, growers of Maryland and Pennsylvania filler tobacco disapproved marketing quotas in referendums held last year. Hence, price supports are not available for these two types through 1979.

FLUE-CURED

Utilization To Equal Crop

Domestic disappearance of flue-cured tobacco (types 11-14) during 1977/78 is expected to fall below last season's 634 million pounds. During the first half of the current marketing year, domestic disappearance declined 12 percent from a year earlier. Cigarette output for July-December was 2 percent lower than in the comparable period of 1976, but is expected to rise in January-June 1978 above a year earlier.

Exports so far this marketing year are well above last season's level. Most Asian destinations are taking more. July-December 1977 exports of 305 million pounds were 26 million pounds above the 1971-1975 average for that period. Exports for the rest of the season may remain about the same as the levels for last season. For the first 6 months, shipments to the EC were down while those to Japan and the Philippines rose (table 23).

Carryover To Remain Unchanged

The 1977 crop will about equal disappearance again this crop year. This means that the flue-cured carryover on July 1 will stay about the same as the 2,066 million pounds of mid-1977.

Since the flurry of sales early last summer, manufacturers and dealers have bought only limited amounts from CCC loan stocks to supplement their auction purchases. During July 1977-February 1978, 174 million pounds of flue-cured tobacco were sold from loan stocks, compared with only 19 million a year earlier. By March 1, unsold loan stocks of 565 million pounds were below the year-earlier level, but remained substantially above those of the previous 4 years (table 22).

Table 19—Flue-cured tobacco: Lugs, primings, and nondescript grades as percent of total loan receipts and crop marketings, 1962-77

Year	Loan receipts	Crop marketings	Year	Loan receipts	Crop marketings	Year	Loan receipts	Crop marketings
	Percent			*Percent*			*Percent*	
1963	21.1	35.6	1968	18.9	36.7	1973	61.4	26.0
1964	17.6	35.9	1969	43.0	32.5	1974	97.5	25.3
1965	26.2	33.1	1970	44.8	33.9	1975	75.7	31.5
1966	10.2	31.0	1971	34.4	30.0	1976	47.2	29.6
1967	8.4	32.0	1972	15.2	28.6	1977	44.6	42.2

Compiled from records and reports of Tobacco Division, Agricultural Marketing Service, and Flue-cured Tobacco Cooperative Stabilization Cooperation.

Table 20—Flue-cured tobacco: Effective farm quotas, designations, and marketings, 1976-78[1]

Type and State or marketing area	Effective farm quotas		Initial designation[2]		Final designation		Marketings	
	1978	Change from 1977	1976	1977	1976	1977	1976	1977
	Mil. lb.	*Percent*	*Mil. lb.*					
11-Virginia (E)	103	-8.4	164	132	172	139	123	109
11-North Carolina (D,E)	270	-6.2	271	292	287	238	339	282
Total	373	-6.5	435	424	459	377	462	391
12-North Carolina (C)[4]	421	+5.7	576	423	591	501	433	345
13-North Carolina (B)	106	+5.3	118	107	123	110	110	92
13-South Carolina (B)	141	+.3	156	141	163	145	153	138
Total	247	+2.5	274	248	286	255	263	230
14-Alabama	1	-7.4	---	---	---	---	1	1
14-Florida (A)	24	-3.4	32	25	32	25	30	24
14-Georgia (A)	119	-10.6	153	146	158	151	123	130
Total	144	-8.9	185	171	190	176	154	155
Total, flue-cured[3]	1,184	-1.1	1,471	1,265	1,527	1,309	1,313	1,121

[1] Data may not add to totals due to rounding. [2] Growers were allowed to designate 110 percent of their effective quotas. [3] Computed from unrounded data. [4] Fayetteville, N.C. was moved from Area B (1975) to Area C (1976).

Compiled from reports from Tobacco Division, Agricultural Marketing Service and Price Support and Loan Division, Agricultural Stabilization and Conservation Service.

Table 21—Flue-cured tobacco: Acreage allotted and underproduction, 1961-78

Year	Acreage allotted[1]	Under production[2]	
		Number	As percent of allotments
	Thousands acres		*Percent*
1961	714.2	15.7	2.2
1962	745.2	15.4	2.1
1963	708.5	14.0	2.0
1964	638.2	10.7	1.7
1965	606.6	44.3	7.3
1966	644.9	38.0	5.9
1967	644.7	34.4	5.3
1968	578.2	45.2	7.8
1969	640.9	64.1	10.0
1970	638.7	54.6	8.5
1971	572.1	46.3	8.1
1972	562.3	48.7	8.7
1973	642.4	67.3	10.5
1974	725.9	109.6	15.1
1975	854.8	137.6	16.1
1976	765.0	98.4	12.9
1977	651.7	61.6	9.4
1978	641.0		

[1] Basic allotment adjusted for overmarketings and undermarketings, 1966 to present. [2] Acreage allotted minus harvested acres.

Compiled from records and reports of Price Support and Loan Division, ASCS and Economics, Statistics, and Cooperatives Service.

Projected Crop Same as the 1977 Level

The basic quota for 1978 is the same, and adding net undermarketing gives an effective quota of 1,184

Table 22—Tobacco loan stocks, 1975-78

(Farm-sales weight)

Type	End of February		
	1976	1977	1978
	Million pounds		
Actual			
Flue-cured, 11-14	369.5	[1] 619.0	
Burley, 31	53.3	[1] 44.1	
Virginia, 21	.3	([2])	
Kentucky-Tennessee, 22-23	.3	0	
Kentucky-Tennessee, 35-36	([2])	([2])	
Ohio, 42-44	0	0	
Puerto Rican, 46	0	3.3	
Connecticut Valley, 51-52	.4	.8	
Wisconsin, 54-55	([2])	([2])	
Total	423.8	667.2	
Uncommitted			
Flue-cured, 11-14	340.8	598.7	
Burley, 31	53.7	38.8	

[1] January 31, 1977. [2] Negligible.

Compiled from records of Producer Associations Division, ASCS.

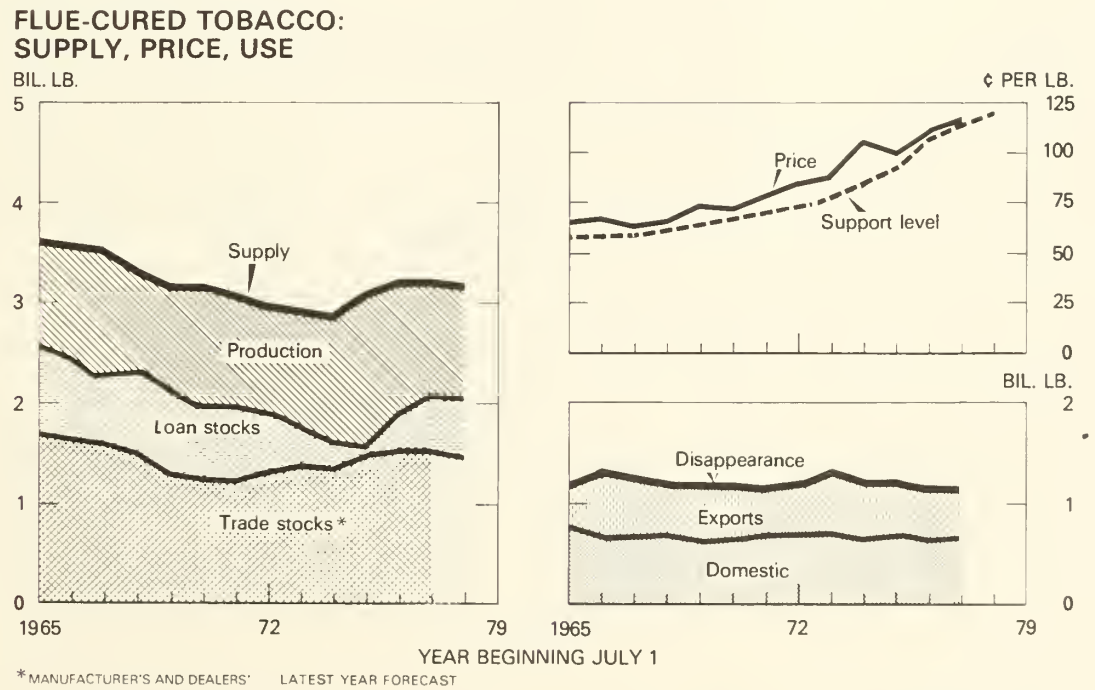


Table 23—United States exports of unmanufactured tobacco by types, to principal importing countries, crop years, 1976/77-1977/78

(Declared weight)

Importing countries	1976/77	Part year thru January[2] 1976/77	Part year thru January[2] 1977/78[2]
	Million pounds		
	Flue-cured, types 11-14		
United Kingdom	47.2	36.8	36.6
West Germany	57.1	31.9	29.4
Japan	67.9	66.5	73.1
Netherlands	13.1	7.9	9.3
Thailand	18.1	7.5	5.9
Australia	9.0	5.7	6.4
Italy	19.4	5.0	13.3
Sweden	8.2	7.1	7.5
Norway	4.8	2.7	1.6
Finland	4.7	3.7	2.1
Denmark	11.6	6.3	9.6
Ireland	5.0	2.6	1.4
Belgium-Luxembourg	4.6	2.8	5.5
Switzerland	7.2	5.3	6.2
South Vietnam	0	0	0
Philippines	8.9	4.2	5.3
Spain	5.2	2.7	3.1
Malaysia	9.1	4.9	4.5
Taiwan	13.6	13.6	12.6
Egypt	11.3	2.7	6.0
Other countries	55.8	33.5	23.1
Total	381.8	253.4	262.5
	Burley, type 31		
Italy	16.4	.4	.3
Sweden	2.9	1.1	.2
Denmark	2.4	1.0	.8
Netherlands	1.7	1.0	.1
Japan	10.2	2.0	*
West Germany	18.6	5.9	.9
Switzerland	6.5	.5	*
Syria	2.6	0	0
Thailand	4.4	0	0
Philippines	5.0	1.0	1.5
Other countries	16.4	2.0	1.6
Total	87.1	14.9	5.4
	Maryland, type 32		
Belgium-Luxembourg	1.0	0	.2
West Germany	1.5	.7	.1
Switzerland	5.5	1.0	.3
Other countries	1.4	.4	.1
Total	9.4	2.1	.7
	Ky.-Tenn. Fire-cured, types 22-23		
Sweden	.9	.5	0
Netherlands	12.1	3.6	3.2
Belgium-Luxembourg	1.2	.1	*
France	1.4	0	0
Switzerland	.9	.6	.2
Other countries	4.1	.6	.4
Total	20.6	5.4	3.8
	Stems, trimmings, and scrap		
Sweden	3.1	(2)	.2
Denmark	6.5	2.6	2.4
United Kingdom	16.2	12.6	8.9
West Germany	7.2	4.3	3.6
Japan	24.2	21.0	24.4
Other countries	38.0	22.0	23.9
Total	95.2	62.5	63.4

Importing countries	1976/77	Part year thru January[2] 1976/77	Part year thru January[2] 1977/78[2]
	Thousand pounds		
	Va. fire & sun-cured, types 21 & 37		
Switzerland	913	127	0
Norway	1,187	297	160
Sweden	523	250	214
West Germany	775	258	163
Other countries	2,355	511	89
Total	5,753	1,443	626
	One Sucker, type 35		
Belgium-Luxembourg	0	0	0
Zaire	0	0	0
Other countries	7	0	77
Total	7	0	77
	Green River, type 36		
United Kingdom	52	0	0
Zaire	0	0	0
Other countries	2	2	49
Total	54	2	49
	Cigar Filler, types 41-44		
New Zealand	0	0	0
France	138	4	60
Other countries	198	121	16
Total	336	125	76
	Connecticut Binder, types 51-52		
West Germany	0	0	0
United Kingdom	0	0	0
Canada	68	48	0
Other countries	65	48	36
Total	133	89	36
	Wisconsin Binder, types 54-55		
Dominican Republic	8	8	79
Other countries	1	0	0
Total	9	8	79
	Cigar Wrapper, types 61-62		
United Kingdom	299	299	307
West Germany	168	51	244
Canada	104	69	24
Dominican Republic	1,691	909	1,221
Netherlands	553	370	0
Other countries	549	233	900
Total	3,364	1,931	2,696
	Black Fat		
Dahomey	1,466	690	324
Cameroon	287	161	143
Niger	400	160	160
Nigeria	352	0	0
Togo	273	104	164
Other countries	156	44	94
Total	2,934	1,159	885

[1] July-June crop year for flue-cured, cigar wrapper, stems, trimmings, and scrap; October-September crop for all other types.
[2] Subject to revision. Detail may not add to total due to rounding.

Detail may not add to total due to rounding.

Compiled from publications and records of the Bureau of the Census.

million pounds, about 1 percent below the 1977 quota (table 20). By tobacco belts, the change from last year's effective quota ranges from a decrease of 10 percent in the Georgia-Florida Belt to an increase of 6 percent in the Eastern North Carolina Belt.

A crop about the same size as last season is expected. Historically, producers have marketed an average of 95 percent of poundage quotas, although acreage has been only 89 percent of acreage allotments (1968-77). Thus, the effective quota multiplied by the 95 percent historical relationship gives a projected 1978 production of about 1,125 million pounds, or around the same as last season.

The projected crop, plus the anticipated carryover, indicate a 1978/79 supply of about the same amount as the 3.2 billion pounds available in the current marketing year (table 14 and table 21).

USDA changed the flue-cured tobacco program in March to allow cooperating growers to increase their planted acreage up to 120 percent of acreage allotment if they agree not to harvest the four lower leaves. Nonparticipants would have to stay within their allotment (no tolerance; the 1977 tolerance was 10 percent). This change was made to reduce the surplus of lower stalk, less desirable tobacco, particularly in the stabilization inventory.[2]

[2] "USDA Considering Change in Flue-cured Tobacco Program," USDA Press Release 3691-77, Dec. 20, 1977; "Proposed Rules," *Federal Register*, Vol. 43, No. 5, Jan. 9, 1978, p. 1351; "USDA Announces Change in Flue-cured, Tobacco Program," USDA Press Release 625-78, March 2, 1978.

BURLEY

Effective Quota Smaller; Crop May Be Down

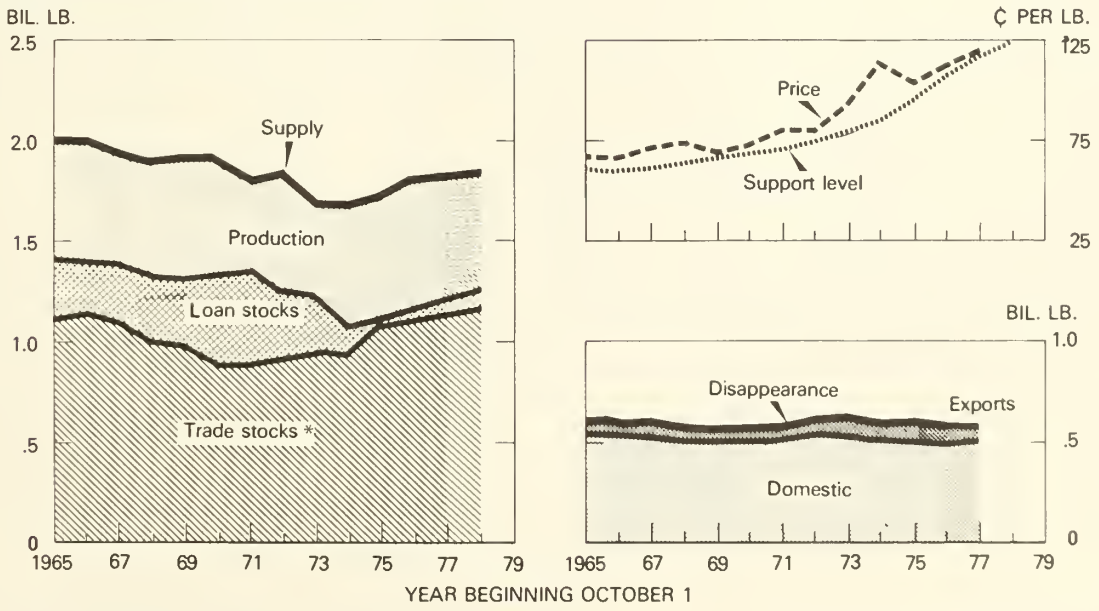
The 1978 basic quota for burley tobacco is 615 million pounds, about 3 percent below last year. Marketings for the 1977 crop season are totaling about 610 million pounds, down 8 percent from the previous season, and well below the effective quota. The quota carryover from the 1977 season brains the effective farm quota for this year to around 675 million pounds, down 1 percent. Moreover, tobacco stocks carried over by growers in excess of quota could further reduce their crop plans.

Although growers have the advantage of a support level in 1978 that goes above the 1977 market price average, the level of the growers' effective quota will probably hold marketings close to the 1977 levels. In the last 5 years growers marketed about 88 percent of the effective quota. Such marketings in 1978 would fall slightly below the 1977/78 season and provide a supply similar to that in the current marketing year.

Supply About the Same

The 1977/78 burley supply reached 1.82 billion pounds, 1 percent above a year earlier. Supply is equal to 3 times the estimated disappearance. Carryover held by manufacturers, dealers, and loan coops last October 1 was 4 percent above a year earlier, but below that of October 1972 (table 24)).

BURLEY TOBACCO: SUPPLY, PRICE, USE



* MANUFACTURERS' AND DEALERS' LATEST YEAR FORECAST.

USDA

NEG. ESCS-381-C 78 (2)

Table 24—Flue-cured tobacco, types 11-14, and burley tobacco, type 31: Acreage, yield, production, carryover, supply, disappearance, season average price, and price support operations, 1967-78

(Farm-sales weight)

Marketing year	Acreage harvested	Yield per acre	Production	Beginning stocks[1]			Total supply
				Manufacturers and other	Under loan	Total	
	Thousand acres	*Pounds*	*Million pounds*				
	Flue-cured, types 11-14						
1967	610.3	2,070	[2] 1,250.0	1,587.1	685.4	2,272.5	3,522.5
1968	533.0	1,841	[2] 995.6	1,528.1	773.4	2,301.5	3,297.1
1969	576.8	1,825	1,052.8	1,299.6	800.5	2,100.1	3,152.9
1970	584.1	2,042	[2] 1,178.1	1,227.5	744.9	1,972.4	3,150.5
1971	525.8	2,050	[2] 1,076.3	1,214.5	761.9	1,976.4	3,052.7
1972	513.6	1,971	[2] 1,022.1	1,292.4	617.8	1,910.2	2,932.3
1973	575.1	2,011	[2] 1,159.0	1,347.0	402.3	1,749.3	2,908.3
1974	616.3	2,014	[2] 1,245.1	1,330.6	276.7	1,607.3	2,852.4
1975	717.2	1,973	[2] 1,414.7	1,471.9	179.9	1,651.8	3,066.5
1976	666.6	1,974	[2] 1,316.0	[3] 1,539.1	359.2	[3] 1,898.3	3,214.3
1977[4]	590.1	1,910	1,124.3	1,509.2	556.9	2,066.1	3,190.4
1978[5]			1,125.0	1,485.4	580.0	2,065.4	3,190.4
	Burley, type 31						
1967	237.7	2,274	540.6	1,104.8	276.7	1,381.5	1,922.1
1968	237.6	2,372	563.4	1,002.4	321.7	1,324.1	1,887.5
1969	237.7	2,488	591.4	975.7	340.8	1,316.5	1,907.9
1970	216.4	2,590	560.5	887.9	454.8	1,342.7	1,903.2
1971	213.5	2,213	472.6	882.4	468.4	1,345.8	1,818.4
1972	235.6	2,552	[2] 590.3	920.9	327.6	1,248.5	1,838.8
1973	222.1	2,028	[2] 461.4	952.5	276.7	1,229.2	1,690.6
1974	260.7	2,350	[2] 610.4	931.5	139.2	1,070.7	1,681.1
1975	282.2	2,265	[2] 638.3	1,082.4	12.0	1,094.4	1,732.7
1976	285.8	2,376	[2] 663.8	1,115.3	44.8	[3] 1,160.1	1,823.7
1977[4]	275.5	2,335	[2] 610.0	1,159.1	54.9	1,206.3	1,816.3
1978[5]			594.0	1,151.3	75.0	1,216.3	1,810.3

Marketing year	Disappearance			Average price per pound	Price support level	Placed under loan	
	Total	Domestic	Exports			Quantity	Percentage of crop
	Million pounds			*Cents*		*Million*	*Percent pounds*
	Flue-cured, types 11-14						
1967	1,221.0	687.7	533.3	64.2	59.9	282.1	22.6
1968	1,197.0	671.7	525.3	66.6	61.6	128.8	12.9
1969	1,180.5	645.9	534.6	72.4	63.8	97.6	9.3
1970	1,174.1	640.1	534.0	72.0	66.6	144.2	12.2
1971	1,142.5	662.5	480.0	77.2	69.4	55.7	5.2
1972	1,183.0	664.2	518.8	85.3	72.7	24.3	2.4
1973	1,301.0	703.0	598.0	88.1	76.6	30.7	2.7
1974	1,200.6	652.3	548.3	105.0	83.3	23.0	1.9
1975	1,193.1	670.6	522.5	99.8	93.2	259.0	18.4
1976	1,148.2	634.0	514.2	110.4	106.0	276.9	21.1
1977	[5] 1,125.0	[5] 625.0	[5] 500.0	[4] 117.9	113.8	194.1	17.2
	Burley, type 31						
1967	598.0	544.6	53.4	71.8	61.8	64.2	11.9
1968	571.0	516.1	54.9	73.7	63.5	56.2	10.0
1969	565.2	507.1	58.1	69.6	65.8	158.2	26.8
1970	557.4	503.0	54.4	72.2	68.6	47.7	8.5
1971	569.9	515.2	54.7	80.9	71.5	.2	- - -
1972	609.6	534.5	75.1	79.2	74.9	22.9	3.9
1973	619.0	533.1	86.8	92.9	78.9	.7	.1
1974	586.7	518.8	67.9	113.7	85.8	2.8	.4
1975	602.5	510.1	92.4	105.6	96.1	50.7	7.9
1976	617.4	500.6	116.8	114.2	109.3	46.6	7.0
1977	[5] 600.0	[5] 510.0	[5] 90.0	[6] 120.0	117.3	[6] 56.1	[6] 8.7

[1] July 1 for flue-cured; October 1 for burley. [2] Sales. [3] Adjusted for change in conversion factor January 1, 1977. [4] Subject to revision. [5] Estimated, projected crop. [6] Through March 2.

Despite rising burley prices and maintained cigarette sales and exports, manufacturers and dealers have purchased little of the old crop loan stocks. From the 1977 crop, the two grower loan associations took about 9 percent, or about 56 million pounds.

Reduced cigarette production in recent months means domestic burley use in 1977/78 may remain near the 500 million pounds of the last marketing year. Exports increased rapidly prior to the October-November dock strike boosting shipments in the previous marketing year. Shipments in October 1977-January 1978, hampered by the October-November dock strike, decreased about 12 million pounds from a year earlier. Smaller shipments went to Sweden, Switzerland, the Netherlands, South Korea, and Denmark.

World burley production in 1977 remained about the same as a year earlier. Increases in the Republic of Korea and Mexico offset decreased production in the United States. Continued increases in foreign output in 1978 can result in more extensive competition for U.S. exports in 1978.

1977 Crop Summary

The 1977 crop value is below the 1976 record of $775 million. This season's marketings were hampered by bad weather in late January and early February, and reduced production cut sales volume. Quality was about the same as last season's as principal offerings were good and fair leaf, good mixed, and fair lugs.

Auction prices for the 1977 burley crop (including resales) average $1.20 a pound—6 cents above the 1976 record. Average prices by selected grades ranged from 1 to 7 cents per pound below the average price for C4F (fair, orange, cutters) (table 25).

Average prices in all producing States increased (table 26). By markets, prices ranged from $1.06 per pound to $1.25.

All markets opened November 21 and the season may

Table 25—Burley tobacco: Price spreads among specified grades, average 1955-69, annual 1970-77

Period	Average price of C4F	Cents per pounds lower than C4F						
		X4F	C4R	B4F	B4FR	B4R	T4R	N1G
	Cents per pound							
Average:								
1955-59	67	1	2	3	5	7	11	25
1960-64	71	1	4	4	9	14	19	32
1965-69	74	1	5	4	7	10	11	19
1970	77	0	[1]5	3	5	8	10	18
1971	82	1	[1]1	1	1	1	2	11
1972	80	0	[1]1	0	0	0	2	9
1973	93	1	[1]2	0	0	0	1	11
1974	117	1	[1]5	1	0	0	2	28
1975	112	2	[1]7	1	3	4	11	29
1976	118	2	[1]4	2	3	5	9	27
1977[2]	126	2	[1]6	1	2	4	7	33

[1] C4K grade. [2] Through February 24, 1978.

Table 26—Burley tobacco: Gross sales, and average price, by States, crops of 1976-77

State	1976		Placed under Government loan		1977[1]		Placed under Government loan	
	Sales	Average price	Quantity	Percentage of sales	Sales	Average price	Quantity	Percentage of sales
	Million pounds	*Cents per pound*	*Million pounds*	*Percent*	*Million pounds*	*Cents per pound*	*Million pounds*	*Percent*
Kentucky	504.3	115.14	30.5	6.1	426.3	121.90	31.7	7.4
Tennessee	127.8	113.00	6.3	5.2	118.9	115.90	14.2	12.0
Virginia	29.7	111.77	1.8	6.0	32.0	116.88	3.2	10.0
North Carolina	18.6	109.70	1.9	10.4	22.3	111.24	2.4	10.7
West Virginia	4.7	102.53	.5	10.5	3.9	113.79	.4	10.0
Indiana	14.1	112.51	2.1	12.4	15.8	119.79	1.5	9.7
Ohio	13.1	113.06	1.4	10.8	4.3	121.29	.8	6.5
Missouri	5.0	105.79	1.9	37.1	5.8	115.45	1.7	28.7
Total all States[2]	719.6	114.29	46.4	6.5	637.5	119.98	56.0	8.8

[1] Through February 24. [2] Computed from unrounded data.

end in mid-March at Lexington. The 1977/78 marketing season was extended because the snow and cold weather in January hampered usual market preparation and delivery. However, the markets will likely close before the April 20 closing of last season. Sales usually peak in price before the market closes for the Christmas holidays. This season the post holiday demand has been strong lifting the season average price to $1.20 per pound as the season ends.

SOUTHERN MARYLAND

Auctions Open April 11

Auctions for the 1977 crop of Southern Maryland tobacco (type 32) are scheduled to open April 11 and end June 7. Maryland tobacco does not receive Government price support. For the 1976 crop (marketed mostly in 1977), growers received the highest average price on record, $1.10 a pound. Quantity marketed through actions was 40 percent above the previous season's small marketings. Last season almost no type 32 tobacco was grown in quota-type areas because the quota law counts most of those sales against the producer's quota or it imposes penalties.

Supply Steady

Use during 1977 was large enough to keep January 1, 1978, stocks near the year-earlier level. Growers produced about the same size crop in 1977 as the previous season. This year's supply is about the same as in 1976/77, when use was about the same as marketings. Use remained near 30 million pounds, despite record prices paid (table 27).

Exports during October 1977-January 1978 were reduced by the October-November dock strike. Switzerland, a major market, took considerably less than in the previous season.

No quotas apply on Southern Maryland tobacco. However, production has remained near 30 million pounds since 1968, except for poor yields in 1972 and 1975. The 1978/79 supply—projected output plus tentative carryover—may remain around 2.4 times annual use.

FIRE-CURED

Large Crop—Lower Prices

Auction prices declined from last season's record as the volume of fire-cured (types 21-23) rose sharply and quality declined. Virginia crop (type 21) prices were down 20 cents per pound from $1.18. The overall average auction price of $1.17 per pound for the 1977 crop (types 21-23) is down 5 percent from the record last year. Prices declined for the Kentucky-Tennessee (types 22-23 after a sharp jump in price last season. Auction sales began in early December. Final sales were held on February 16 for type 21. Volume of producer marketings increased one-third for type 21. About 14 percent of the crop, 1 million pounds, was placed under loan, compared to under 100,000 pounds last season.

Auctions for types 22-23 began January 11, but have experienced several delays due to heavy snows. About one-fourth of the estimated crop had moved through auctions by mid-February 1978. Last season's brisk demand resulted in 85 percent of the crop being purchased on farms. This season's farm purchases may account for about 50 percent. Last winter's weather hampered crop preparation and sales did not end until April 6, 1977. A closing date for 1978 auction sales has not been set.

For types 22-23, this season's grade price averages ranged from $1.50 per pound for some B3F and C4F grades to 59 cents per pound for N2. Prices at the farm were higher than at auctions, as more nondescript and poor quality tobacco appeared at auction this year compared with last season. Deliveries to loan associations remained low.

Use May Decline

During the first third of the current marketing year (October 1977-January 1978), exports of Kentucky-Tennessee and Virginia fire-cured were curtailed by the dock strike. Foreign fire-cured production increased 11 million pounds last year. Malawi and Italy showed the principal production increases and Poland the principal decline. Consequently, U.S. exports will likely fall below the 1976/77 level this marketing year. The stability in snuff production and a slight decline in plug chewing output in the United States, coupled with the high price, may result in a decline in domestic use of fire-cured types in 1977/78 (table 28).

Acreage Allotments Stable

Acreage allotments for farms growing Kentucky-Tennessee fire-cured will total about the same as 1977. Growers planted about 80 percent of their allotments in 1977. With auction prices declining 5 percent, growers may reduce plantings to near the average acreage of the past three seasons (22,000 acres). Using average yield, production in 1978 will likely exceed the disappearance in 1976/77.

The national quota for Virginia fire-cured also is about the same as 1977. Quotas for Virginia fire-cured will remain the same as last season for farms that historically have produced more than 75 percent of their quotas.

Carryover of fire-cured tobacco on October 1, 1978 may rise above the 48 million pounds of last October 1. For next year the carryover stocks, plus the projected crop, would provide a supply slightly larger than the current year total of 102 million pounds.

Table 27—Southern Maryland tobacco, type 32: Acreage, yield, production, carryover, supply, disappearance, season average price, 1968-77

Marketing year	Acreage harvested	Yield per acre	Supply			Disappearance[1]			Average price per pound to growers
			Production	Stocks, Jan. 1	Total	Total	Domestic	Exports	
	Thousand acres	*Pounds*	*Million pounds*						*Cents*
1968	29.0	1,100	31.9	81.5	113.4	48.7	38.3	10.4	69.8
1969	26.5	1,060	28.1	66.7	94.8	41.3	29.1	12.2	75.1
1970	27.0	1,090	29.4	50.1	79.5	39.5	27.6	11.9	78.6
1971	27.0	1,040	28.1	46.0	74.1	25.5	17.5	8.0	81.9
1972	24.0	990	23.8	46.6	70.4	25.5	13.4	12.1	84.5
1973[2]	27.8	1,260	35.0	43.8	78.8	26.1	13.8	12.3	87.8
1974[2]	26.0	1,260	32.8	51.7	84.5	33.5	25.0	8.5	92.2
1975[2]	23.5	950	21.1	53.6	74.7	34.8	25.1	9.7	107.5
1976[3]	23.0	1,300	29.9	41.9	71.8	29.7	17.2	12.5	110.0
1977[4]	23.0	1,300	29.9	45.3	75.2				

[1] Year beginning October 1. [2] Includes sales and certification. [3] Based on Maryland crop and 75 thousand pounds estimated for other States. [4] Preliminary.

DARK AIR-CURED

Larger Supplies, Stable Prices

Another record-high price prevailed for the 1977 crop of One Sucker, Green River, and Virginia sun-cured tobaccos (types 35-37). Quality of offerings was below the previous season. Total volume was up sharply. Auction sales started in early December and were completed by February 16.

The average price was up 2 cents for type 35 (the largest sales volume). Grades of C3F and B3F for One Sucker (type 35) were $1.28 and $1.30) per pound respectively, 8 to 10 cents above last season's. Nondescript N1G was $1.03, 8 cents below last season. Green River (type 36) average was down 1 cent. Grade averages for Green River were up 6 cents for fair quality thin leaf (C4F46) and down 3 cents ($1.09) per average for N2G. The Virginia sun-cured (type 37) average declined 4 cents from the 1976 crop. Virginia sun-cured grade prices were about the same as last season's or lower.

At 49 million pounds, the 1977/78 supply of dark air-cured is up about 6 percent. Virginia sun-cured supplies continue to decline (table 29).

Use Pattern Mixed

Plug, twist, and fine-cut chewing tobaccos are the chief domestic outlets for dark air-cured tobaccos. Chewing tobacco output increased in the last three years. The output was up 9 percent in the October-December 1977 period (first quarter of the current marketing year) from last year.

Allotments Unchanged

Acreage allotments this year of dark air-cured tobacco (types 35-36) remain slightly over 13,000 acres and sun-cured allotments about 1,500 acres. The same size allotments along with the steady prices to growers suggests growers may continue to produce near this season's level.

CIGAR TOBACCO

Prices Higher

Producers of cigar tobacco are receiving higher prices this season than last. Crops continue to be sold into early 1978. Most of the Connecticut and Wisconsin binder crops were sold last fall. Buyers and sellers began negotiating prices for Ohio and Pennsylvania crops in February; the sales pace was not as rapid as last season because the extreme cold had delayed stripping and marketing. Pennsylvania tobacco sold for 60 cents per pound. Prices have been near 66 cents in Ohio and 85 cents in Wisconsin. Season average price and production data for the 1977 cigar tobacco crop are scheduled for release on May 9.

Overall price support levels for the 1978 crop of cigar leaf tobacco are about 6.3 percent higher than for the 1977 crops. No Government price support applies for Pennsylvania tobacco (type 41) or shade-grown cigar wrapper (types 61-62).

For many years, the Puerto Rican Government has allocated an annual poundage quota to cigar filler growers and made supplemental payments. The current supplement is 23 cents per pound. The supplement seeks to encourage production that has been below disappearance in most recent years.

Cigar Filler and Binder Allotments: About the Same as 1977

For most farms growing cigar filler and binder tobacco (types 42-44, 51-52, and 53-55), USDA set

Table 28—Fire-cured tobacco, Kentucky-Tennessee types 22-23, and Virginia fire-cured type 21: Acreage, yield, production, carryover, supply, disappearance, season average price, and price support operations, 1968-77

(Farm-sales weight)

Marketing year beginning October 1	Acreage harvested	Yield per acre	Production	Beginning stocks, October 1—			Total supply
				Manufacturers and other	Under loan	Total	
	Thousand acres	*Pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*
	Kentucky-Tennessee fire-cured, types 22-23						
1968	17.9	1,822	32.6	57.3	21.5	78.8	111.4
1969	19.0	1,797	34.1	61.1	11.6	72.7	106.8
1970	17.7	1,749	30.9	54.1	9.7	63.8	94.7
1971	19.5	1,928	37.6	48.6	4.7	53.3	90.9
1972	20.4	1,844	37.6	55.0	1.2	56.2	93.8
1973	16.6	1,668	27.7	54.2	3.1	57.3	85.0
1974	16.2	1,602	26.0	44.0	1.1	45.1	71.1
1975	18.4	1,772	32.6	40.5	.1	40.7	73.3
1976	21.2	1,567	33.2	42.6	(2)	42.6	75.8
1977[1]	26.0	1,807	46.9	41.2	(2)	41.2	88.1
	Virginia fire-cured, type 21						
1968	4.9	1,205	5.9	8.9	2.8	11.7	17.6
1969	5.0	1,340	6.7	8.0	1.9	9.9	16.6
1970	5.0	1,230	6.2	8.4	1.4	9.8	16.0
1971	5.0	1,180	5.9	8.0	1.0	9.0	14.9
1972	4.8	970	4.7	7.9	.4	8.3	13.0
1973	4.7	1,205	5.7	7.6	(2)	7.6	13.3
1974	5.0	1,185	5.9	7.1	—	7.1	13.0
1975	5.0	975	4.9	7.1	.3	7.3	12.2
1976	5.3	1,000	5.3	7.4	(2)	7.4	12.7
1977[1]	7.3	1,000	7.3	7.0	(2)	6.7	14.0

	Disappearance			Average price per pound	Price support level	Placed under loan	
	Total	Domestic	Exports			Quantity	Percentage of crop
	Million pounds	*Million pounds*	*Million pounds*	*Cents*	*Cents*	*Million pounds*	*Percent*
	Kentucky-Tennessee fire-cured, types 22-23						
1968	38.7	[3]19.1	19.6	51.1	43.1	.4	1.2
1969	43.0	18.5	24.5	48.1	44.6	1.9	5.6
1970	41.4	13.1	28.3	54.4	46.6	(2)	.1
1971	34.7	16.0	18.7	60.8	48.5	(2)	.1
1972	36.5	14.2	22.3	57.3	50.8	2.8	7.4
1973	39.9	15.7	24.2	71.7	53.5	.2	.7
1974	30.3	14.5	15.8	93.4	58.2	.7	2.7
1975	30.7	12.2	18.5	104.7	65.2	.1	.4
1976	34.6	[4]11.2	23.4	142.4	74.1	(2)	—
1977				[5]127.7	79.5	.8	1.6
	Virginia fire-cured, type 21						
1968	7.7	3.0	4.7	46.9	43.1	.2	3.4
1969	6.8	1.7	5.1	53.1	44.6	.1	1.5
1970	7.0	2.4	4.6	52.0	46.6	.1	2.0
1971	6.6	3.1	3.5	54.8	48.5	.1	1.0
1972	5.4	1.3	4.1	64.2	50.8	(2)	.1
1973	6.2	1.7	4.5	75.5	53.5	(2)	- - -
1974	5.7	0.7	5.0	81.7	58.2	.3	4.5
1975	4.8	1.4	3.4	93.0	65.2	(2)	.9
1976	6.1	[4]2.0	[4]4.1	118.0	74.1	.1	1.5
1977				[5]96.6	79.5	1.0	13.4

[1] Subject to revisions. [2] Less than 50,000 pounds. [3] Includes 4.7 million pounds fire loss, April 1969. [4] Includes 400,000 pounds fire loss, December 1976. [5] Through March 2. —Less than 0.5 percent.

Table 29—Dark air-cured tobacco, types 35-36, and Sun-cured tobacco type 37: Acreage, yield production, carryover, supply, disappearance, season average price, and price support operations, 1968-78

(Farm-sales weight)

Marketing year beginning Oct. 1	Acreage harvested	Yield per acre	Production	Beginning stocks			Total supply
				Manufacturers and others	Under loan	Total	
	Thousand acres	*Pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*
	Dark air-cured, types 35-36						
1968	9.8	1,831	18.0	41.1	17.1	58.2	76.2
1969	10.1	1,793	18.1	44.1	15.0	59.1	77.2
1970	8.2	1,863	15.4	35.5	18.2	53.7	69.1
1971	8.6	1,834	15.7	35.5	14.3	49.8	65.5
1972	8.2	1,875	15.5	33.5	12.7	46.2	61.7
1973	7.6	1,647	12.4	31.9	12.8	44.7	57.1
1974	7.0	1,653	11.6	31.4	5.5	36.9	48.5
1975	8.0	1,750	14.0	32.7	(2)	32.9	46.9
1976	9.3	1,630	15.1	28.2	---	28.2	43.3
1977[1]	11.1	1,775	20.3	26.1	---	26.1	46.4
	Sun-cured, type 37						
1968	1.1	1,095	1.2	3.9	0	3.9	5.1
1969	1.1	1,225	1.3	3.8	0	3.8	5.1
1970	1.0	1,100	1.1	3.3	0	3.3	4.4
1971	.9	1,200	1.1	3.1	0	3.1	4.2
1972	.8	1,010	.8	3.0	0	3.0	3.8
1973	.7	1,320	.9	3.2	0	3.2	4.1
1974	.7	1,315	.9	3.0	0	3.0	3.9
1975	.7	930	.7	2.3	0	2.3	3.0
1976	.7	1,115	.8	2.1	0	2.1	2.9
1977[1]	.8	1,000	.8	1.8	0	1.8	2.6

	Disappearance			Average price per pound	Price support level	Placed under loan	
	Total	Domestic	Exports			Quantity	Percentage of crop
	Million pounds	*Million pounds*	*Million pounds*	*Cents*	*Cents*	*Million pounds*	*Percent*
	Dark air-cured, types 35-36						
1968	17.1	15.0	2.1	47.4	38.3	.7	3.9
1969	23.5	21.2	2.3	40.3	39.7	4.8	26.5
1970	19.3	16.7	2.6	46.0	41.4	1.0	6.8
1971	19.3	17.4	1.9	47.1	43.1	1.7	10.7
1972	17.0	14.7	2.3	50.3	45.2	1.2	.8
1973	20.2	17.4	2.8	61.9	47.6	(2)	.2
1974	15.6	12.8	2.8	76.9	51.8	.4	3.7
1975	18.7	16.1	2.6	89.8	58.0	.1	.5
1976	17.2	15.1	2.1	113.3	65.9	(2)	---
1977				[3]117.2	70.7	(2)	---
	Sun-cured, type 37						
1968	1.3	1.1	.2	53.2	38.3	[4]1	.1
1969	1.8	1.5	.3	52.8	39.7	[4]1	.1
1970	1.3	1.1	.2	53.8	41.4	[4]3	.3
1971	1.2	1.0	.2	54.1	43.1	0	---
1972	.6	.4	.2	57.9	45.2	0	---
1973	1.1	.9	.2	69.2	47.6	0	---
1974	1.6	1.3	.3	82.1	51.8	[4]13	1.4
1975	.9	.7	.2	85.5	58.9	0	---
1976	1.1	[3].9	[3].2	105.0	65.9	0	---
1977				[3]100.2	70.7	[4]13	1.6

[1] Subject to revision. [2] Less than 50,000 pounds. [3] Through March 2. [4] Quantity placed under loan in thousands of pounds. - - -Less than .05 percent.

Table 30—Foreign grown cigar leaf tobacco: U.S. Imports and stocks, 1975-78

(Farm sales weight)

Country of origin	General imports[1]			Imports for consumption				Dealers and manufacturers stocks, January 1			
	1975	1976	1977	Oct.-Sept. 1976-77	October-January			1975	1976	1977	1978
					1975-76	1976-77	1977-78[2]				
	Million pounds										
Philippines	30.0	42.4	14.5	14.6	13.8	4.9	3.2	37.7	43.8	38.2	28.9
Dominician Rep.	16.0	11.4	14.0	13.5	4.9	4.1	2.3	19.2	19.6	17.8	11.4
Brazil	8.8	18.8	17.4	8.8	5.4	4.6	1.5	7.9	8.0	6.9	7.8
Columbia	6.4	5.1	9.4	3.6	2.3	.8	.7	11.5	9.5	8.9	8.4
Paraguay	7.6	3.8	6.0	4.6	1.7	2.1	.7	10.9	8.2	7.4	8.1
Mexico	7.1	5.1	6.6	4.1	1.6	.9	.5	6.2	6.1	4.3	4.4
Indonesia	8.4	8.1	11.8	5.3	2.2	2.0	.9	10.9	11.8	10.9	12.8
All others	74.1	44.4	79.8	16.5	17.2	10.8	4.7	20.3	24.1	19.9	18.5
Total	158.4	139.1	158.5	71.0	49.1	30.2	14.5	124.6	131.1	114.3	100.3

[1] Includes scrap tobacco from some countries than may be used in cigarette manufacture. [2] October-December 1977.

1978 acreage allotments about the same as for 1977. For several years the USDA has allowed Ohio filler and Wisconsin binder farms to surrender their allotment and retain the crop history. Allotments are reallocated to other farms.

Annually since 1970, USDA has suspended quotas for Connecticut Valley binder (types 51-52). Price supports remain in effect.

U.S. and Puerto Rican Supplies Increase

Total supplies of U.S. (including Puerto Rican) cigar tobacco are up about 3 percent or 5 million pounds as both production and carryover increased. Cigar wrapper supplies continued to decrease (table 31). Wrapper production in Georgia and Florida has all but ceased as the major buyer left the area in 1976. The Puerto Rican crop planted in late 1977 for harvest in early 1978 is tentatively estimated at 4 million pounds—slightly below last year.

Cigar tobaccos are the weakest market for U.S. tobacco types in recent years. After 6 years of sharp reductions, cigar wrapper supplies are still adequate for the declining disappearance.

Less foreign cigar tobaccos arrived in the United States in 1977 than the year before. Foreign-grown leaf stocks on January 1, 1978 were 12 percent below a year earlier. However, stocks of 100 million pounds remain about double annual use.

Domestic Use Declining

Cigarmakers continued to sell fewer small and large cigars in 1977, but with the gain in chewing tobacco use, domestic disappearance of U.S. filler types will probably stay near last year's low level. Imported tobacco accounts for about three-fourths of our total filler use. During October 1977-January 1978, cigar factories used more imported cigar tobacco than a year earlier, with all major sources providing more.

Cigar wrapper use has been trending downward reaching a record low level. Nevertheless, total disappearance is expected to exceed the 1977 crop of 5.5 million pounds. July 1, 1978 carryover could decline again.

The only potential increase in cigar tobacco use may result from an increase in sales of chewing tobacco and expensive cigars. These gains could boost Wisconsin cigar tobacco and Connecticut Valley binder, respectively.

INTERNATIONAL DEVELOPMENTS

World Tobacco Harvest Down Slightly[3]

Global production of leaf tobacco fell 3 percent in 1977 to 12.0 billion pounds (5.4 million metric tons) as output of most types declined from year-earlier levels. Production increases in India, Korea, Canada, Columbia, and Malawi were offset by declines in the United States, Turkey, Greece, Poland and Bulgaria. Oriental tobacco set the pace with a 16-percent drop. Flue-cured output fell by 3 percent, and burley remained at about the 1976 level. Although the industry is in a tighter supply position, the situation is not considered critical. Going into

[3] U.S. Department of Agriculture, Foreign Agricultural Service, *World Tobacco Output Declined 3 Percent in 1977; Stock Drawdown Seen in 1978.*, Foreign Agriculture Circular, FT8-77, December 1977.

Table 31—Cigar tobacco, types 41-62: Domestic supplies, disappearance, and season average prices, 1968-77

(Farm-sales weight)

Crop year	Acreage harvested	Yield per acre	Supply			Disappearance			Average price per pound to growers
			Production	Beginning stocks[1]	Total supply	Total	Domestic	Exports	
	Thousand acres	*Pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Cents*
	Pennsylvania Seedleaf Filler (type 41)								
1968	21.0	1,775	37.3	108.7	146.0	40.9	40.0	.9	30.0
1969	20.0	1,825	36.5	105.1	140.6	44.3	43.7	.6	30.0
1970	17.0	1,800	30.6	97.3	127.9	40.9	40.7	.2	31.0
1971	15.2	1,610	24.5	87.0	111.5	41.3	40.6	.4	36.0
1972	13.0	1,400	18.2	70.2	88.4	34.7	34.4	.3	46.0
1973	13.0	1,700	22.1	53.7	75.8	28.3	27.5	.8	52.0
1974	13.0	2,000	26.0	47.5	73.5	24.3	24.0	.3	58.0
1975	12.0	1,650	19.8	49.2	69.0	22.2	21.8	.4	58.0
1976	13.5	1,750	23.6	46.8	70.4	20.7	20.3	.4	60.0
1977[2]	13.0	1,810	23.5	49.7	73.3				
	Ohio, Miami, Valley Filler (types 42-44)								
1968	2.0	1,670	3.4	12.9	16.3	5.4	5.4	---	31.0
1969	1.7	1,650	2.8	10.9	13.7	4.7	4.7	---	32.5
1970	1.6	1,750	2.9	9.0	11.9	4.1	4.1	---	38.0
1971	2.0	1,850	3.8	7.8	11.6	4.6	4.6	---	41.0
1972	2.4	1,780	4.2	7.0	11.2	4.4	4.4	---	44.0
1973	2.2	1,420	3.1	6.8	9.9	4.0	4.0	---	51.0
1974	2.0	1,530	3.1	5.9	9.0	3.1	3.1	---	59.0
1975	1.8	1,660	3.0	5.9	9.1	3.4	3.4	---	60.0
1976	1.9	1,650	2.8	5.7	8.5	2.5	2.5	---	59.0
1977[2]	1.7	1,800	3.1	6.0	9.1				
	Puerto Rico Filler (type 46)[3] [4]								
1968	6.0	1,282	7.6	34.4	42.0	16.2	16.2	---	33.3
1969	4.7	1,303	6.1	25.8	31.9	12.6	12.6	---	33.6
1970	3.2	1,397	4.5	19.3	23.8	8.8	8.8	---	36.1
1971	4.8	1,418	6.7	15.0	21.7	9.0	9.0	---	39.8
1972	5.6	883	4.8	12.7	17.5	8.3	8.3	---	42.1
1973	4.5	1,435	6.5	9.2	15.7	5.7	5.7	---	42.1
1974	2.7	1,477	3.9	10.0	14.0	7.9	7.9	---	45.5
1975	2.7	1,500	4.3	6.1	10.4	3.2	3.2	---	50.7
1976	2.8	1,429	4.1	7.2	11.3	4.9	4.9	---	57.6
1977[2]	2.6	1,480	3.9	6.4	10.3				
	Total Cigar Filler (types 41-46)								
1968	29.0	1,666	48.3	156.0	204.3	62.5	61.6	.9	30.5
1969	26.4	1,721	45.4	141.8	187.2	61.6	61.0	.6	30.6
1970	21.8	1,737	38.0	125.6	163.6	53.8	53.6	.2	32.1
1971	22.0	1,587	35.0	109.8	144.8	54.9	54.5	.4	37.3
1972	21.0	1,293	27.2	89.9	117.1	47.4	47.1	.3	45.0
1973	19.7	1,450	31.7	69.7	101.4	38.0	37.2	.8	49.7
1974	18.0	1,850	33.1	63.4	96.5	35.3	35.0	.3	56.6
1975	17.3	1,630	27.3	61.2	88.5	28.8	28.4	.4	56.2
1976	18.2	1,676	30.5	59.7	90.2	28.1	27.7	.4	59.4
1977[2]	17.3	1,725	30.5	62.1	92.6				
	Connecticut Valley Binder (types 51-52)								
1968	1.6	1,808	2.8	11.2	14.0	5.1	4.7	.4	59.5
1969	1.6	1,434	2.3	8.9	11.2	4.2	3.9	.3	58.2
1970	1.7	1,756	2.9	7.0	9.9	2.7	2.4	.3	65.5
1971	1.6	1,743	2.8	7.2	10.0	2.6	2.5	.1	65.1
1972	1.6	1,600	2.5	7.4	9.9	2.4	2.3	.1	70.1
1973	1.6	1,721	2.7	7.5	10.2	3.2	3.1	.1	72.8
1974	1.5	1,737	2.5	7.0	9.5	3.3	3.1	.2	82.0
1975	1.5	1,568	2.4	6.2	8.6	4.3	4.1	.2	92.7
1976	1.5	1,605	2.4	4.3	6.7	2.4	2.3	.1	89.6
1977[2]	1.6	1,685	2.6	4.3	6.9				
	Southern Wisconsin Binder (type 54)								
1968	3.7	1,990	7.4	19.9	27.3	7.7	7.7	---	36.8
1969	3.7	1,740	6.4	19.6	26.0	9.3	9.3	---	36.8
1970	4.4	2,135	9.4	16.7	26.1	7.3	7.3	---	40.2
1971	5.3	2,270	12.0	18.8	30.8	10.5	10.5	---	50.3
1972	5.0	1,685	8.4	20.3	28.7	9.3	8.3	---	48.0
1973	4.9	1,950	9.6	19.4	29.0	10.1	10.1	---	60.5
1974	4.7	2,060	9.7	18.9	28.6	8.8	8.8	---	74.9
1975	5.6	1,945	10.9	19.8	30.7	7.5	7.5	---	75.1
1976	5.6	1,890	10.6	23.2	33.8	10.0	10.0	---	74.7
1977[2]	6.2	2,050	12.7	23.8	36.5				
	Northern Wisconsin Binder (type 55)								
1968	4.0	1,670	6.7	28.9	35.6	14.9	14.5	.4	37.9
1969	3.7	1,815	6.7	20.7	27.4	8.8	8.5	.3	43.4
1970	4.4	2,055	9.0	18.6	27.6	9.2	9.1	.1	52.0
1971	5.3	1,980	10.5	18.4	28.9	9.9	9.9	*	54.0
1972	5.8	1,770	10.3	19.0	29.3	9.8	9.8	*	49.0
1973	5.3	1,775	9.4	19.5	28.9	12.0	12.0	*	60.7
1974	4.7	1,870	8.8	16.9	25.7	9.9	9.9	*	75.4
1975	5.4	1,835	9.9	15.8	25.7	9.7	9.6	.1	75.1
1976	5.5	1,750	9.6	16.0	25.6	9.4	9.4	*	75.2
1977[2]	5.7	1,900	10.8	16.2	27.0				

See footnote at end of table.

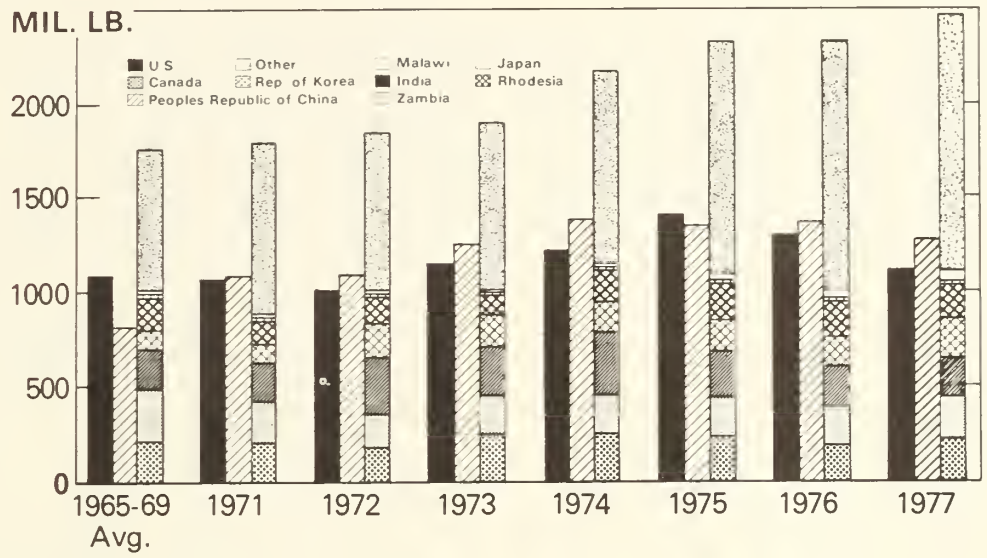
Table 31—Cigar tobacco, types 41-62: Domestic supplies, disappearance, and season average prices, for 1968-77—Cont.

(Farm-sales weight)

Crop year	Acreage harvested	Yield per acre	Supply			Disappearance			Average price per pound to growers
			Production	Beginning stocks[1]	Total supply	Total	Domestic	Exports	
	Thousand acres	*Pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Cents*
	Total Wisconsin Binder (types 54-55)								
1968	7.7	1,824	14.1	48.8	62.9	22.6	22.2	.4	37.3
1969	7.4	1,778	13.1	40.3	53.4	18.1	17.8	.3	41.8
1970	8.8	2,095	18.4	35.3	53.7	16.5	16.4	.1	51.1
1971	10.6	2,125	22.5	37.2	59.7	20.4	20.4	*	54.9
1972	10.8	1,731	18.7	39.3	58.0	19.1	19.1	*	48.5
1973	10.2	1,859	19.0	38.9	57.9	22.2	22.2	*	60.6
1974	9.4	1,965	18.5	35.8	54.3	18.7	18.7	*	75.1
1975	11.0	1,891	20.8	35.6	56.4	17.2	17.1	.1	75.1
1976[2]	11.1	1,821	20.2	39.2	59.4	19.4	19.4	*	75.2
1977[2]	11.9	1,978	23.5	40.0	63.5				
	Total Cigar Binder (types 51-55)								
1968	9.3	1,821	16.9	60.0	76.9	27.7	26.9	.8	41.0
1969	9.0	1,716	15.4	49.2	64.6	22.3	21.7	.6	44.3
1970	10.5	2,041	21.3	42.3	63.6	19.2	18.8	.4	53.1
1971	12.2	2,075	25.3	44.4	69.7	23.0	22.9	.1	56.1
1972	12.4	1,714	21.2	46.7	67.9	21.5	21.4	.1	51.1
1973	11.8	1,841	21.7	46.4	68.1	25.4	25.3	.1	62.1
1974	10.9	1,934	21.0	42.8	63.8	22.0	21.8	.2	76.0
1975	12.5	1,851	23.2	41.8	65.1	21.5	21.2	.3	76.9
1976[2]	12.6	1,795	22.6	43.5	66.1	21.8	21.6	.2	76.5
1977[2]	13.5	1,944	26.2	44.3	70.5				
	Connecticut Valley Shade-grown (type 61)								
1968	8.4	1,215	10.2	12.7	22.9	10.8	9.1	1.7	280.0
1969	6.3	1,288	8.1	12.1	20.2	8.0	7.0	1.0	400.0
1970	6.0	1,535	9.3	12.2	21.5	7.6	6.6	1.0	400.0
1971	4.7	1,635	7.7	13.9	21.6	8.4	5.7	2.7	400.0
1972	4.1	1,250	5.1	13.2	18.5	7.6	4.8	2.8	485.0
1973	5.0	1,210	6.1	10.7	16.8	8.3	6.4	1.9	515.0
1974	4.8	1,625	7.8	8.5	16.3	6.8	2.8	3.9	600.0
1975	4.4	1,371	6.0	9.5	15.5	8.0	4.2	3.8	640.0
1976[2]	4.2	1,555	6.6	7.5	14.1	5.2	1.9	3.3	540.0
1977[2]	3.3	1,610	5.3	8.9	14.2				
	Georgia-Florida Shade-grown (type 62)								
1968	5.0	1,556	7.9	8.8	16.7	9.2	7.1	2.1	270.0
1969	5.0	1,569	7.8	7.5	15.3	6.1	5.2	.9	280.0
1970	3.6	1,590	5.6	9.2	14.8	6.7	5.8	.9	270.0
1971	3.0	1,582	4.7	8.1	12.8	6.2	5.4	.8	262.0
1972	3.0	1,517	4.6	6.6	11.2	4.2	3.8	.4	280.0
1973	2.6	1,413	3.7	7.0	10.7	4.2	3.7	.5	350.0
1974	1.9	1,724	3.2	6.5	9.7	3.6	3.1	.5	380.0
1975	1.1	1,556	1.7	6.2	7.9	1.9	1.5	.4	400.0
1976[2]	.4	1,680	.6	6.0	6.6	2.4	2.0	.4	395.1
1977[2]	.1	1,700	.2	4.2	4.5				
	Total Shade-grown (types 61-62)								
1968	13.4	1,343	18.1	21.5	39.6	20.0	16.2	3.8	276.0
1969	11.3	1,411	15.9	19.6	35.5	14.1	12.2	1.9	341.3
1970	9.6	1,555	14.9	21.4	36.3	14.3	12.4	1.9	351.0
1971	7.7	1,614	12.4	22.0	34.4	14.6	11.1	3.5	347.5
1972	7.1	1,365	9.7	19.8	29.5	11.8	8.6	3.2	387.0
1973	7.6	1,280	9.8	17.7	27.5	12.5	10.1	2.4	452.2
1974	6.6	1,652	11.0	15.0	26.0	10.4	6.0	4.4	536.1
1975	5.5	1,409	7.7	15.7	23.4	9.8	5.6	4.2	585.7
1976[2]	4.6	1,565	7.2	13.6	20.8	7.6	3.8	3.3	528.2
1977[2]	3.5	1,604	5.6	13.1	18.7				
	Grand Total Cigar Tobacco (types 41-62)								
1968	51.7	1,610	83.3	237.5	320.8	110.2	104.7	5.5	85.9
1969	46.7	1,645	76.7	210.6	287.3	98.0	94.9	3.1	97.7
1970	41.9	1,771	74.2	189.3	263.4	87.3	84.8	2.5	102.3
1971	41.9	1,734	72.7	176.2	248.9	92.5	88.5	4.0	96.7
1972	40.4	1,434	58.1	156.4	214.5	80.7	77.1	3.6	104.4
1973	39.1	1,627	63.2	133.8	197.0	75.9	72.6	3.3	116.1
1974	35.5	1,834	65.3	121.2	186.3	67.7	62.8	4.9	142.5
1975	35.4	1,635	57.9	118.6	176.5	60.1	55.2	4.9	135.1
1976[2]	35.4	1,700	60.3	116.8	177.1	57.5	53.1	4.4	121.4
1977[2]	34.3	1,816	62.3	119.5	181.8				

[1] October 1 for types 41-55; July 1 for types 61-62. [2] Subject to revision. [3] Puerto Rican planting occurs late in calendar year; projected for 1977. [4] Excludes payment by Puerto Rican Government; 23 cents per pound in 1976. *Less than 50,000 pounds.

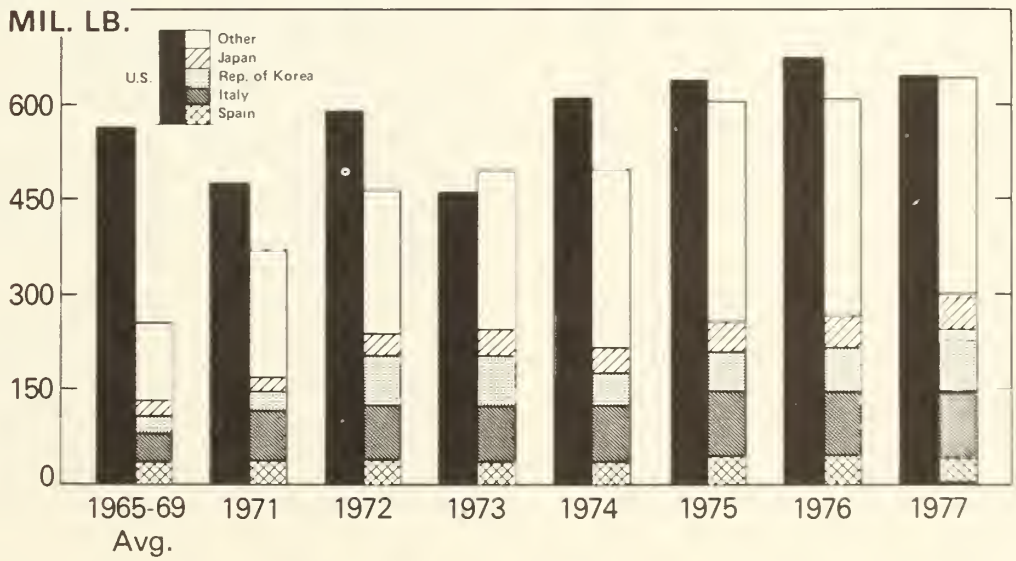
FLUE-CURED TOBACCO: ESTIMATED WORLD PRODUCTION



USDA

NEG. FAS 2359-78 (2)

BURLEY TOBACCO: ESTIMATED WORLD PRODUCTION



U.S. DEPARTMENT OF AGRICULTURE

NEG. FAS 2402-77(12) FOREIGN AGRICULTURAL SERVICE

Table 32—Flue-cured and Oriental tobacco production in specified countries, average 1970-74, 1976-77

Country	Average 1970-74	1976[1]	1977[2]
	Million pounds		
Flue-cured:			
Argentina	62	86	97
Canada	223	175	222
Mexico	13	18	15
Brazil	191	344	355
Angola	8	11	11
Mozambique	6	3	3
Zambia	12	14	13
Malawi	1	36	51
Rhodesia	141	220	187
Tanzania	25	32	36
Uganda	6	3	3
South Africa	40	44	58
Iran	8	11	11
China, Rep. of	39	58	54
Sri Lanka	11	9	8
India	256	213	208
Indonesia	32	18	20
Japan	199	218	225
Khmer	7	4	4
Korea, Rep. of	142	168	201
Pakistan	53	50	66
Philippines	64	106	99
Thailand	52	80	81
South Vietnam	6	6	8
Total	1,597	1,927	2,036
Oriental:			
Greece	162	269	215
Bulgaria	270	295	251
Yugoslavia	93	116	102
Turkey	376	694	492
Total	901	1,374	1,060
Burley:			
Italy	82	92	97
Mexico	20	54	51
Greece	28	36	32
Korea, Rep. of	52	77	103
Malawi	13	16	22
Brazil	30	51	55
Total	225	326	360

[1] Subject to revision. [2] Preliminary.

Compiled from reports of Foreign Agricultural Service.

1977, Oriental leaf supplies were in excess in many producing countries and the lower production will shift supply more in line with demand at prevailing prices. Flue-cured and Burley users may experience shortages and higher prices among certain grades, but supplies should be generally adequate to meet anticipated demand. Stocks will likely be drawn down somewhat during 1978.

World cigarette output in 1977 may be up slightly in numbers, but leaf requirements are expected to lag as manufacturers continue to adopt new technology that reduces leaf utilization per cigarette. Leaf use in cigarettes may be about the same as in the previous year.

World burley production in 1977 was about one-fourth as large as flue-cured output. As the American-type of blended cigarette increases in popularity abroad, burley production is expected to expand.

Oriental production in 1977 was about two-fifths as large as flue-cured . Oriental tobacco makes up most of the 18 percent of imported tobacco used in the popular American-type blended cigarette. The 1977 drop in Oriental leaf output resulted from drought and over-supply problems in Turkey and Greece. Turkish output was down 29 percent and Greek output 20 percent. The oversupply of oriental tobacco contrasts with the relative restricted supply of flue-cured and burley tobacco during the past year and flue-cured and burley prices strengthened relative to oriental leaf.

United Kingdom Developments; Other News Briefs

In the United Kingdom a revised health warning, "cigarettes can seriously damage your health," has been introduced on all new packages and in print advertising published since October 1, 1977. The new version is part of the anti-smoking attack begun by the British Social Services Secretary early in 1977.

The tax system introduced January 1 brings the United Kingdom in line with other European countries, and will likely mean increased sales of king-size brands. Applying the taxes on end-products rather than primarily on tobacco weight has the tendency to push up the price of small cigarettes relative to king-size brands. Manufacturers anticipated this development and have been promoting king-sized brands. After July 1, 1978, the United Kingdom will have authority to apply a surtax based upon tar content within the maximum specific tax allowed.

According to trade sources, a cigarette made from the skin of cocoa beans and containing no nicotine or tobacco is being tested in California. If the market tests are successful, the manufacturer intends to make the cigarette in California later this year.

In Rhodesia, a major U.S. competitor in the tobacco export market before 1966, progress has been made in settling the longstanding political controversy. The 12-year-old independent government has agreed on an interim government that would transfer to majority rule by the end of the year. It is too early to tell whether or not international sanctions that apply to Rhodesia's trade will be lifted.

Table 33—United States and world production and exports of flue-cured, burley and all unmanufactured tobacco, 1955-77

Period	Flue-cured			Burley			All tobacco		
	United States	World total	United States as % of total	United States	World total	United States as % of total	United[1] States	World total	United States as % or total
	Million pounds		*Percent*	*Million pounds*		*Percent*	*Million pounds*		*Percent*
	Production (farm-sales weight)								
Average:									
1955-59	1,208	2,914	41	486	595	82	1,941	8,519	23
1960-64	1,335	3,305	41	623	775	80	2,211	8,898	25
1966	1,108	3,531	31	587	802	73	1,899	9,636	20
1967	1,263	3,859	33	541	811	67	1,979	10,368	19
1968	982	3,649	27	563	837	67	1,721	9,833	18
1969	1,053	3,823	28	591	866	68	1,810	9,821	18
1970	1,193	3,937	30	561	906	62	1,911	10,021	19
1971	1,078	3,918	28	473	868	55	1,712	9,865	17
1972	1,012	4,076	25	601	1,094	55	1,754	10,155	17
1973	1,157	4,404	27	450	944	48	1,744	10,670	17
1974	1,241	4,788	26	613	1,113	55	1,994	11,385	18
1975	1,415	5,100	28	639	1,240	52	2,186	11,837	18
1976	1,316	5,021	26	679	1,294	52	2,140	12,284	17
1977[2]	1,127	4,883	23	643	1,299	50	1,938	11,962	16
	Exports (unmanufactured, export weight)[3]								
AVerage:									
1955-59	413	683	60	28	47	60	500	1,434	35
1960-64	397	772	52	42	74	57	497	1,691	30
1966	423	710	60	46	107	43	551	1,689	33
1967	427	750	57	46	97	40	572	1,821	31
1968	444	800	56	43	108	40	599	1,801	33
1969	430	833	52	52	127	41	577	1,810	32
1970	368	810	45	41	125	33	510	1,838	28
1971	342	893	38	36	128	28	473	1,890	25
1972	425	1,047	41	54	175	31	606	2,341	26
1973	418	1,049	40	59	210	28	613	2,288	27
1974	441	1,152	38	61	265	23	651	2,603	25
1975	391	1,010	39	62	231	27	563	2,378	24
1976	379	1,228	31	68	258	26	578	2,715	22
1977[2]	410	---	---	79	---	---	629	---	---

[1] Includes Puerto Rico. [2] Subject to revision. [3] Total excludes Sino-Soviet countries. [4] Estimated. Foreign data supplied by the Tobacco Division, Foreign Agricultural Service. —Not available.

Table 34—Japan tobacco: Production, tobacco and cigarettes, and tobacco imports, 1975-77[1]

Item	1975	1976	1977
	--- Thousand metric tons ---		
Production[2]	147	158	157
Imports by source:			
United States	48	57	45
Other	44	41	37
Total	92	98	83
	--- Billions ---		
Cigarette production	294	276	298

[1] Compiled from official trade data. [2] Redried weight.

Table 35—United Kingdom tobacco: Imports, exports, stocks, clearances, and exports, 1975-77[1]

Item	1975	1976	1977
	--- Million pounds ---		
Imports by source:			
United States	88	69	46
Commonwealth	140	107	103
Other	86	108	131
Total	314	284	280
Exports:			
Manufactured products	70	78	87
Unmanufactured	6	7	10
Stocks, Dec. 31:			
United States	121	112	NA
Other	278	292	NA
Total	399	404	NA
Gross clearances:			
Commonwealth rate	134	112	[2]54
Other rates	174	200	[2]269
Total	308	312	[2]323

[1] Compiled from official trade data. [2] January-September. NA=not available.

Table 36—West Germany: Production and imports, 1975-77

Item	1975	1976	1977
	--- Thousand metric tons ---		
Production[2]	8	9	9
Imports by source:			
United States	45	36	[3]36
Other	134	131	[3]95
Total	179	167	[3]131
Exports and re-exports	10	34	32
Stocks by source, Jan. 1:			
United States	37	37	28
Other	155	155	151
Total	192	192	179

[1] Compiled from official trade data. [2] Redried weight. [3] Through November.

Table 37—Cash receipts from farm marketings ,and tobacco, 1968-77 with percentages

Period	Cash receipts				Tobacco as a percentage of—	
	Livestock and products	All crops	Total farm	Tobacco	All crops	Total cash receipts
	Million dollars				*Percent*	
1968	25,539	18,846	44,386	1,173	6.2	2.6
1969	28,439	18,790	47,229	1,296	6.9	2.7
1970	29,543	20,911	50,454	1,388	6.6	2.8
1971	30,560	22,245	52,805	1,328	6.0	2.5
1972	35,670	25,520	61,190	1,442	5.7	2.4
1973	45,824	41,050	86,875	1,570	3.8	1.8
1974	41,377	51,271	93,178	2,197	4.3	2.3
1975	42,901	46,611	90,370	2,155	4.6	2.4
1976	46,991	47,802	94,793	2,280	4.7	2.4
1977[1]	47,453	47,572	95,025	2,331	4.9	2.5

[1] Preliminary.

Table 38—Expenditures for tobacco products, and disposable personal income, 1968-77

Year	Total	Cigarettes	Cigars	Other[1]	Disposable personal income[2]	Percent of disposable personal income spent on tobacco products			
						All products	Cigarettes	Cigars	Other[1]
	Million dollars				*Billion dollars*	*Percent*			
1968	10,112	9,094	703	315	588	1.72	1.55	.12	.05
1969	10,444	9,404	701	339	630	1.66	1.49	.11	.05
1970	11,544	10,448	707	389	686	1.68	1.52	.10	.06
1971	12,155	11,040	700	415	743	1.64	1.49	.09	.06
1972	12,910	11,765	720	425	801	1.61	1.47	.09	.05
1973	13,485	12,325	730	430	902	1.50	1.37	.08	.05
1974	14,475	13,270	705	500	985	1.47	1.35	.07	.05
1975	15,505	14,250	680	575	1,084	1.43	1.32	.06	.05
1976	16,390	15,110	655	625	1,186	1.38	1.28	.05	.05
1977[4]	17,100	15,800	600	700	1,309	1.31	1.21	.05	.05

[1] Smoking tobacco, chewing tobacco, and snuff. [2] Compiled from reports of Department of Commerce, Bureau of Economic Analysis. [3] Subject to revision. [4] Estimated.

Table 39—Governmental revenues from tobacco products, 1968-77

Year	Federal Government				State and local Governments		All Governments
	Cigarettes[1]	Cigars[2]	Other[3]	Total	State	Local	
	Million dollars						
1968	2,086	54	2	2,142	2,067	99	4,308
1969	2,020	56	1	2,077	2,186	113	4,376
1970	2,113	55	2	2,170	2,458	134	4,762
1971	2,098	54	2	2,154	2,637	154	4,945
1972	2,151	53	1	2,195	2,951	179	5,321
1973	2,404	53	3	2,460	3,126	145	5,731
1974	2,308	52	2	2,362	3,287	113	5,762
1975	2,349	50	3	2,302	3,369	119	5,790
1976	2,332	48	4	2,374	3,445	[4]121	5,940
1977[4]	2,500	36	4	2,540	3,560	100	6,200

[1] Includes large ciagrettes. [2] Includes small cigars and revenue on cigars from Puerto Rico covered into the Treasury of Puerto Rico. [3] Includes cigarette paper and tubes, and imported cigarettes and cigars. [4] Estimated.

Compiled from reports of the Internal Revenue Service and the Bureau of the Census.

Table 40 --Marketing quota referendums, by kinds of tobacco

Kind (type numbers in parentheses) and basis of quotas 1/	Last referendum				Next referendum	
	Date	Crops to which applicable	Number voting	Percentage voting in favor of quota 2/	Probable date 3/	Crops to which applicable
Flue-cured (11-14) Acreage-poundage	Dec. 16, 1976	1977-79	141,353	98.5	Dec. 1979	1980-82
Burley (31) Poundage	Feb. 22-25, 1977	1977-79	244,816	99.0	Feb. 1980	1980-82
Maryland (32)	Feb. 22-25, 1977	1977-79	2,528	31.4	Feb. 1980 4/	1980-82
Fire-cured (21-23)	Feb. 23-27, 1976	1976-78	10,494	94.2	Feb. 1979	1979-81
Dark air-cured (35-36)	Feb. 23-27, 1976	1976-78	11,181	94.8	Feb. 1979	1979-81
Va. sun-cured (37)	Feb. 22-25, 1977	1977-79	403	95.8	Feb. 1980	1980-82
Pa. filler (41)	Feb. 22-25, 1977	1977-79	798	13.0	Feb. 1980 4/	1980-82
Cigar binder (51-52)	Feb. 21-24, 1978	1978-80	175	83.4	Feb. 1981	1981-83
Cigar filler and binder (42-44, 53-55)	Feb. 21-24, 1978	1978-80	4,513	90.8	Feb. 1981	1981-83

1/ Quotas based on acreage allotments unless otherwise specified. 2/ A majority of two-thirds or more of farmers voting is required for marketing quotas to become effective under the acreage allotment program or acreage-poundage program. 3/ Probable month, but referendums can occur earlier if warranted by pertinent considerations. 4/ Unless at least a fourth of the growers petition the Secretary in the interim.

Table 41.--Tobacco: Acreage, yield, production, stocks, supply, disappearance, price and crop value, United States and Puerto Rico, 1947-77

(Farm-sales weight)

Crop year	Acreage	Yield per acre	Production	Stocks 1/	Supply	Disappearance 1/			Average price per pound to growers	Crop value
						Total	Domestic	Exports		
	1,000 acres	Pounds	Million pounds						Cents	Million dollars
United States										
Average:										
1947-49	1,676	1,208	2,019	2,947	4,965	1,908	1,417	491	45.9	926
1950-54	1,690	1,292	2,184	3,382	5,566	2,006	1,479	527	51.2	1,118
1955-59	1,242	1,541	1,914	4,095	6,009	1,951	1,397	554	56.0	1,072
1960-64	1,159	1,879	2,178	3,911	6,089	2,037	1,468	569	60.0	1,307
1965	977	1,898	1,855	4,496	6,351	2,000	1,462	538	65.1	1,207
1966	972	1,939	1,885	4,351	6,236	2,098	1,392	704	66.5	1,252
1967	960	2,050	1,968	4,140	6,108	2,020	1,372	648	66.8	1,316
1968	879	1,945	1,710	2/4,088	5,798	1,975	1,352	623	69.5	1,189
1969	918	1,964	1,803	3,823	5,626	1,949	1,308	640	71.8	1,296
1970	898	2,122	1,906	3,678	5,584	1,919	1,278	639	72.9	1,389
1971	839	2,034	1,705	2/3,667	5,372	1,883	1,312	571	78.6	1,340
1972	842	2,076	1,749	2/3,488	5,237	1,951	1,312	639	83.0	1,451
1973	889	1,963	1,746	2/3,289	5,035	2,081	1,348	732	90.0	1,572
1974	963	2,067	1,994	2/2,948	4,942	1,937	1,284	653	108.6	2,160
1975	1,083	2,015	2,182	2/3,003	5,185	1,941	1,286	655	102.6	2,239
1976 3/	1,044	2,045	2,120	3,297	5,417	1,908	1,230	678	112.5	2,485
1977 4/	966	2,003	1,934	2/3,520	5,469				118.6	2,294
United States and Puerto Rico										
Average:										
1947-49	1,710	1,200	2,045	3,012	5,057	1,942	1,447	495	45.6	932
1950-54	1,728	1,282	2,215	3,430	5,645	2,036	1,508	527	50.9	1,127
1955-59	1,270	1,528	1,941	4,147	6,088	1,981	1,426	555	55.6	1,080
1960-64	1,188	1,861	2,211	3,957	6,168	2,066	1,497	569	59.7	1,319
1965	994	1,882	1,871	4,559	6,430	2,027	1,489	538	64.8	1,212
1966	981	1,934	1,899	4,403	6,300	2,121	1,415	704	66.2	1,256
1967	967	2,045	1,979	4,181	6,160	2,037	1,390	648	66.7	1,319
1968	885	1,941	1,718	2/4,122	5,840	1,992	1,368	623	69.3	1,191
1969	923	1,960	1,810	3,849	5,658	1,961	1,320	640	71.7	1,298
1970	902	2,120	1,912	3,698	5,609	1,928	1,288	639	72.9	1,391
1971	844	2,031	1,714	2/3,682	5,394	1,893	1,321	571	78.5	1,342
1972	848	2,068	1,759	2/3,501	5,260	1,959	1,320	639	82.9	1,453
1973	894	1,960	1,752	2/3,298	5,050	2,087	1,355	732	89.8	1,574
1974	966	2,066	1,998	2/2,953	4,956	1,941	1,288	653	108.5	2,162
1975	1,087	2,013	2,186	3,009	5,195	1,945	1,290	655	102.5	2,241
1976 3/	1,048	2,042	2,124	3,304	5,428	1,912	1,234	678	112.4	2,487
1977 4/	968	2,002	1,938	2/3,530	5,468				118.5	2,296

1/ For flue-cured and cigar wrapper, year beginning July 1; for all other types, October 1. 2/ Includes flue-cured carried over on farms; 1968, 13 million pounds; 1971, 16 million pounds; 1972, 17 million pounds; 1973, 7 million pounds for flue-cured and 13 million pounds for burley, 1974, 5 million pounds for flue-cured; 13/ Subject to revision. 4/ Preliminar, Subject to revision. 4/ Preliminary.

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COSTS OF PRODUCING BURLEY TOBACCO—1976

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ABSTRACT: The variable cost of producing burley tobacco—almost two-thirds for labor—was about $61 per 100 pounds in 1976. Total cost of producing burley tobacco, excluding a charge for land and quota, was $95 per 100 pounds or $2,060 per acre in 1976. Total cost, including land and quota, averaged $132 per 100 pounds. These estimates are based on a survey of 709 burley tobacco producers in the Bluegrass and south central areas of Kentucky and north central and eastern Tennessee.

KEYWORDS: Burley tobacco, production costs, production area.

INTRODUCTION

Information on burley tobacco production costs is essential for evaluating Government tobacco programs and policies, determining the competitive position of burley farmers, and providing farmers with a basis of comparison for their own operations. Cost information is also useful for assessing potential new technologies and institutional changes affecting burley tobacco production and marketing.

The objectives of the study upon which this article is based are to:

(1) Estimate production costs for burley tobacco;

(2) Measure cost variability among production areas;

(3) Provide a data base for periodic updates of the estimates.

METHODOLOGY AND PROCEDURES

Source of Data

Five major burley tobacco production areas in Kentucky and Tennessee were surveyed (table 1). The areas were delineated to include counties that were relatively homogeneous in terms of topography, crops, and cropping practices. A little more than half of all the U.S. burley tobacco is produced in these areas.

The survey population consisted of all farm units in the selected areas that produced burley tobacco in 1976. More than 700 farmers were interviewed in March and April 1977.[1]

Respondents were asked for information on land use and rental arrangements; expenditures for items such as fertilizer and chemicals; field operations and practices; power and equipment inventory including size and age; and family, exchange and hired labor used and wages paid hired workers. Also obtained were expenditures for farm overhead items, such as utilities, recordkeeping, and similar items that are difficult to allocate to burley tobacco.

Procedure for Estimating Costs

Variable costs are expenses incurred by virtue of engaging in the production process and vary according to the quantity and prices of inputs used. Variable cost items such as the costs of hired labor, fertilizer, chemicals, curing and heating fuel custom work, and tobacco crop insurance were obtained from the survey participants. Other variable cost items such as the charge for unpaid family labor, fuel, and repairs for machinery and equipment were not obtained directly from the farmer because of interview time contraints and conceptual problems.

[1] The former Statistical Reporting Service (SRS), now part of the Economics, Statistics, and Cooperatives Service, assisted in developing the survey questionnaire, selected the random sample of burley tobacco producers, and collected, edited, and processed the survey data.

Table 1—Counties included in burley tobacco production area groupings

Area 1[1]	Area 2[2]	Area 3[3]	Area 4	Area 5
Kentucky				*Tennessee*
Bourbon	Anderson	Bath	Adair	Campbell
Clark	Bracken	Boyle	Allen	Carter
Fayette	Carroll	Fleming	Casey	Claiborne
Jessamine	Franklin	Garrard	Clinton	Cocke
Mercer	Gallatin	Henry	Cumberland	Grainger
Scott	Grant	Madison	Green	Green
Woodford	Harrison	Marion	Lincoln	Hamblen
	Nicholas	Mason	Monroe	Hancock
	Owen	Mont-	Pulaski	Hawkins
	Pendleton	gomery	Russell	Jefferson
	Robertson	Nelson	Taylor	Johnson
		Oldham	Wayne	Sevier
		Shelby		Sullivan
		Spencer	*Tennessee*	Unicoi
		Trimble		Union
		Washing-	Clay	Washington
		ton	Jackson	
			Macon	
			Pickett	

[1] Includes much of what is usually referred to as the Inner Bluegrass of Kentucky. [2] Includes counties with more than half their physical area in what is usually termed the Intermediate Bluegrass of Kentucky. [3] Includes counties with more than half their physical area in what is usually termed the Outer Bluegrass of Kentucky.

Labor

The labor input charge is straightforward except for services of unpaid family and exchange labor for which there is no established price.

A variation of the "opportunity cost" concept was used. Unpaid labor services were valued at a rate equal to wages paid hired labor on the farm or the average wage in the production area if no labor was hired on a farm. This assumes that all unpaid labor is equal in quality to hired labor and has employment alternatives. The prevailing wage rate may somewhat understate the productivity and opportunity cost of operator and family labor; conversely, it is unlikely that all family labor would have alternative employment opportunities.

Fuel and Lubricants

Fuel consumption data were obtained from data published by the Nebraska Tractor Testing Laboratory. Determination of tractor and machine time for the various machine tasks were based both on survey data and secondary sources.[2]

Fuel prices of 47 cents a gallon for gasoline and 42 cents a gallon for diesel were used (4). Lubrication costs were estimated at 15 percent of fuel costs.

Repairs

Repair costs vary over the life of a tractor or piece of equipment. The formulas to obtain repair costs were taken from Bowers (1).

[2] Various published and unpublished University of Kentucky and Tennessee budgets were the major secondary sources.

All tractors and machinery were assumed to have a useful life of 15 years and no salvage value.[3] In obtaining information about tractors from farmers in the survey, three age groups were delineated—less than 5 years, 5 to 10 years, and more than 10 years. Machinery was assumed to be the same age as the tractor that pulls it. Tractors and equipment were assumed to be purchased in 1974, 1969, or 1964 based on the age groupings reported. Repair costs attributable to tobacco were based on the estimated cost per hour that each tractor and machine is used on tobacco.

Marketing Costs

Marketing costs vary depending on the warehouse in which the tobacco is sold. A charge of 5 percent of gross sales was used.

Other

Other costs include seed, purchased plants, plant bed materials such as canvas not reported elsewhere, car costs, mule or horse upkeep for farms reporting them, as well as other items not specifically mentioned.

Interest

Interest on operating expenses for a 6-month period was charged at 8.3 percent, the approximate average Production Credit Association rate for the study area.

Machinery Ownership

The capital recovery and interest technique was used to figure depreciation and interest charges for machinery. This method is used instead of the straight line technique because it provides for capital recovery plus an interest return (8.3 percent) annually on the amount of capital outstanding at the beginning of the year. The amount to be recovered during the 15-year period was based on the purchase price for 1974, 1969, and 1964 tractors and equipment.

Tractor prices were obtained from the Tractor Blue Book (3). Truck and equipment prices were based on Statistical Reporting Service's Farm Machinery Price Index (4). Capital recovery for each tractor and piece of equipment was prorated to tobacco based on burley's share of total use.

Taxes and a charge for housing were included in tractor and machinery ownership costs. Insurance costs for tractors and machinery could not be separated from other farm insurance costs. However, a pro rata share of farm insurance was allocated to the tobacco crop.

Barn Ownership

Capital recovery for barns is figured on the same basis as for tractors and trucks based on the three age

[3] The useful life of a tractor is often considered as 10 years. However, over half the tractors reported in the survey were over 10 years of age.

groups delineated: less than 5, 5-20, and more than 20 years old. Repair costs include the stripping room. Insurance costs for barns were included in the lump sum insurance category.

Irrigation Costs

Only 5 percent of the tobacco acreage in the study area was irrigated. Secondary data were used to calculate irrigation costs.

General Farm Overhead

Because many farms that grow burley tobacco also produce other crops and livestock, it was necessary to devise a method to allocate the overhead costs between burley tobacco and other crops. The method chosen was to allocate general farm overhead costs not specifically related to burley tobacco based on burley's proportionate share of the total value of farm sales.

Management

Ascertaining the cost of management poses difficult problems because farm management is usually rewarded by "profit." It is not usually separated in farm management budgets, and there are no fee schedules upon which to base charges. A charge of 7 percent of gross receipts has sometimes been assumed and was used in this study (2).

Land and Tobacco Quota

Calculations of land costs for any farm commodity pose conceptual problems. For burley tobacco the problems are even greater because quota production rights combined with support prices are capitalized into land prices. Even though burley tobacco quotas can be leased within county lines, the basic value of quota lies within the lessor's land.

For purposes of this study, the charge for land and tobacco quota is based on the net share rent approach. Net share rent is the residual after landlord payments for fertilizer and chemicals and other inputs and an allocation for barn ownership costs are subtracted from the value of the landlord's share of the crop under prevailing share-rent arrangements.

RESULTS

Description of Study Area

Cost estimates are given for five production areas. Area 1 includes much of what is generally termed the Inner Bluegrass of Kentucky (table 1). The topography is gently rolling and the soils are the most productive in the Bluegrass. An average of 5.5 acres of tobacco was produced per farm in Area 1 in 1976.

Area 2 includes 11 counties that surround the Inner Bluegrass. More than half the physical area of these counties is included in what is generally termed the Intermediate Bluegrass of Kentucky. Much of this area contains narrow winding ridges and slopes. An average of 4.4 acres of tobacco was produced per farm in Area 2 in 1976.

Area 3 contains 15 counties with more than half their physical area in what is generally termed the Outer Bluegrass of Kentucky. The topography is similar to that of the Inner Bluegrass of Kentucky except that it is more rolling. An average of 3.1 acres of tobacco was produced per farm in Area 3 in 1976.

Area 4 includes 12 South Central Kentucky counties and 4 North Central Tennessee counties. The topography of this area is undulating to hilly. An average of 1.7 acres of tobacco was produced per farm in Area 4 in 1976.

Area 5 includes 16 Eastern Tennessee counties. The topography is mainly rolling to hilly. An average of 1.2 acres of tobacco was produced per farm in Area 5. For the study area as a whole, an average 2.4 acres of tobacco was produced per farm.

Variable Costs

The variable costs of producing the 1976 burley tobacco crop averaged nearly $61 per 100 pounds or $1,324 per acre in the study area (tables 2 and 3). Labor—operator, family, exchange, and time and piece rate hired—was by far the largest single variable cost component accounting for 64 percent of variable costs. Fertilizer and lime comprised 10 percent and the marketing fee 9 percent of variable costs.

The areas in the Kentucky Bluegrass averaged lower variable costs per 100 pounds of tobacco produced than Areas 4 and 5. Costs per acre, except for Area 2, were about the same for each area even though wage rates and tobacco yields are higher in Areas 1 and 3. The similarity in costs per acre in these four areas arises mainly from greater labor efficiency in Areas 1 and 3.

When only "out-of-pocket" costs are considered—family, exchange and operator labor excluded—Areas 1 and 2 "out-of-pocket" variable costs are greater than those in Areas 4 and 5.

Total Costs, Excluding Land and Quota

Total costs, excluding land and quota, averaged $95 per 100 pounds of tobacco produced. The costs ranged from $89 in Areas 1 and 3 to $110 in Area 5. Machinery costs averaged $10.50 per 100 pounds and were lowest in Areas 1 and 3 because the equipment was used on larger total acreages of crops.

Barn costs varied according to the age of existing barns and how fully they were utilized. Area 2 has a preponderance of older barns and less excess curing capacity than any of the other areas.

Irrigation costs averaged less than 50 cents per 100 pounds of tobacco produced, about $10 per acre,

Table 2—Burley tobacco: Production costs per 100 pounds, by cost item, specified areas, 1976

Cost item	Area					
	1	2	3	4	5	All
	- - - Dollars per 100 pounds[1] - - -					
Variable	57.64	62.05	56.77	64.54	66.98	60.94
Labor	36.57	38.37	35.77	41.72	42.40	38.56
Hired[2]	19.57	14.02	11.11	10.99	11.69	13.44
Family and exchange	6.66	12.07	12.39	15.02	15.81	21.21
Operator	10.34	12.28	12.27	15.71	14.90	12.91
Fertilizer and lime	4.61	7.01	6.22	6.73	7.88	6.39
Pesticides[3]	.52	.31	.21	.37	.27	.33
Sucker control chemicals	.57	.39	.39	.55	.52	.47
Curing and heating fuel[4]	.52	.46	.28	.23	.13	.32
Custom operations[5]	2.41	1.37	1.40	2.07	1.39	1.72
Fuel and lubricants	1.44	1.84	1.51	1.66	1.87	1.65
Repairs	1.60	2.06	1.50	1.64	1.79	1.69
Tobacco crop insurance[6]	1.27	2.02	1.22	.96	1.19	1.32
Marketing fee[7]	5.70	5.70	5.70	5.70	5.70	5.70
Other[8]	2.43	2.52	2.57	2.91	3.84	2.79
Machinery ownership costs[9]	8.11	10.90	8.18	11.39	16.03	10.50
Barn ownership costs[10]	12.17	8.78	13.19	13.76	15.17	12.32
Insurance[11]	1.31	1.25	1.09	1.20	1.53	1.26
Irrigation costs	.83	.96	.38	.04	.11	.47
General farm overhead	1.17	1.43	1.48	1.34	2.64	1.58
Management[12]	7.66	7.34	7.42	7.83	7.92	7.61
Total, excluding land and quota	88.89	92.71	88.51	100.10	110.38	94.68
Land and quota charge[13]	42.78	38.02	39.53	33.73	26.73	36.89
Yield per acre (pounds)	2,305	2,391	2,272	2,022	1,902	2,180

[1] Because of rounding, costs per acre given in table 2 divided by yield vary 1 to 3 cents per 100 pounds from those reported in this table. Also, marketing fee charges are based on sales and do not include that part of 1976 production which is stored for future sale. [2] Includes time and piece rate hired workers. [3] Includes insecticides, herbicides and fungicides. [4] Includes fuel for aiding curing and heating the stripping room. [5] Includes cost of materials in cases where the farmer could not separate the cost of the materials and the cost of the custom operation. [6] Net of payments for losses. [7] Fee applies only to tobacco sold from 1976 crop. [8] Includes tobacco seed, cover crop seed, plant bed canvas, car costs, mule and horse upkeep and other miscellaneous items. [9] Excludes insurance. [10] Excludes insurance and taxes. [11] Includes tobacco's prorated share of general farm insurance including machinery and barn insurance. [12] Estimated at 7 percent of gross tobacco receipts. [13] Calculated on net share rent basis.

Table 3—Burley tobacco: Production costs per acre, by cost item, specified areas, 1976

Cost item	Area					
	1	2	3	4	5	All
	- - - Dollars per acre - - -					
Variable	1,325.09	1,474.36	1,282.74	1,304.03	1,274.28	1,324.42
Labor	843.16	917.81	813.47	843.70	806.72	840.86
Hired[1]	451.22	335.51	252.88	222.46	222.32	293.12
Family and exchange	153.45	288.63	281.79	303.73	300.85	266.13
Operator	238.49	293.67	278.80	317.51	283.55	281.61
Fertilizer and lime	106.46	167.57	141.46	136.10	150.08	139.59
Pesticides[2]	12.09	7.64	4.82	7.72	5.22	7.27
Sucker control chemicals	13.25	9.26	8.80	11.30	9.94	10.40
Curing and heating fuel[3]	12.07	10.95	6.53	4.62	2.38	7.14
Custom operations[4]	55.79	33.19	31.89	42.11	26.45	37.53
Fuel and lubricants	33.35	44.12	34.53	33.62	35.81	35.90
Repair costs	37.18	49.39	34.30	33.10	34.21	36.99
Tobacco crop insurance[5]	29.50	48.52	27.74	19.56	22.70	28.90
Marketing fee[6]	126.13	125.48	120.45	113.09	107.67	118.54
Other[7]	56.11	60.43	58.75	59.11	73.10	61.30
Machinery ownership costs[8]	187.14	260.80	186.13	230.44	304.95	229.08
Barn ownership costs[9]	280.63	209.88	299.67	278.31	288.61	268.58
Insurance[10]	30.38	30.02	24.95	24.39	29.19	27.49
Irrigation costs	19.13	23.00	8.68	.97	2.16	10.28
General farm overhead	26.99	34.33	33.85	27.19	50.36	34.51
Management[11]	176.59	175.67	168.64	158.33	150.77	165.95
Total, excluding land and quota	2,045.95	2,208.06	2,004.66	2,023.66	2,100.32	2,060.31
Land and quota charge[12]	986.28	909.13	898.13	682.10	508.33	804.16
Yield per acre (pounds)	2,305	2,391	2,272	2,022	1,902	2,180

[1] Includes time and piece rate hired workers. [2] Includes insecticides, herbicides and fungicides. [3] Includes fuel for aiding curing and heating the stripping room. [4] Includes cost of materials in cases where the farmer could not separate the cost of the materials and the cost of the custom operation. [5] Net of payments for losses. [6] Fee applies only to tobacco sold from 1976 crop. [7] Includes tobacco seed, cover crop seed, plant bed canvas, car costs, mule and horse upkeep and other miscellaneous items. [8] Excludes insurance. [9] Excludes insurance and taxes. [10] Includes tobacco's prorated share of general farm insurance including machinery and barn insurance. [11] Estimated at 7 percent of gross tobacco receipts. [12] Calculated on net share rent basis.

because of the small percentage of farmers who irrigated. Irrigation occurred mostly in the Bluegrass Area. The management charge added $7 to $8 per 100 pounds to costs.

Total Costs, Including Land and Quota

Total costs, including the land and quota charge, averaged $132 per 100 pounds of burley tobacco produced in 1976. The cost ranged from $128 in Area 3 to $137 in Area 5. The calculated land and quota charge added $37 to production costs.

Total costs, including land and quota, exceeded the selling price of burley tobacco by about $18 per 100 pounds in 1976. Of the total, $33 per 100 pounds was operator and family labor and management costs. When these costs are excluded, the total costs are $99 per 100 pounds, leaving $15 return per 100 pounds to family labor and management—less than half the calculated.

SUMMARY AND CONCLUSIONS

When only variable costs are considered, Areas 1 and 3 (counties with more than half their physical areas in the Inner and Outer Bluegrass of Kentucky) contained the most cost efficient tobacco producers in terms of costs per 100 pounds produced. Larger yields per acre and greater labor efficiency more than offset the effects of higher wage rates. However, when only "out-of-pocket" costs are considered, the competitive edge in Areas 1 and 3 is lost. With smaller acreages per farm, Areas 4 and 5 rely more heavily on operator and family labor than farms in the Bluegrass area.

When total costs, excluding land and quota, are considered, the Bluegrass areas still hold a competitive edge in terms of production costs per 100 pounds of tobacco produced. Primary cost advantages accrue to the Bluegrass areas because of spreading tractor and machinery costs over larger acreages and fuller utilization of existing barn space.

When total costs, including land and quota, are considered, the difference in costs per 100 pounds of tobacco narrows. Land and quota charges are higher in the Bluegrass areas because of greater competition for tobacco quota and for alternative uses of land.

The cost estimates presented are averages and can vary markedly from one tobacco grower to another. They probably overstate the costs for a tobacco grower whose tractors, machinery, and barns are fully depreciated. On the other hand they may understate the costs for a tobacco grower with new equipment and new barns. The cost estimates presented attempt to portray the average costs of producing burley tobacco in 1976 depicting the age and quantity of fixed resources existing at that time.

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INDEX TO 1977 QUARTERLY ISSUES

Item	Unit or base period	1977		1977-78			Last data as percentage of a year earlier
		Jan.	Feb.	Dec.	Jan.	Feb.	
Average price at auctions							
Flue-cured	Ct. per lb.	---- Closed -----		-------- Closed ---------			---
Burley	Ct. per lb.	113.2	112.8	Closed	121.1	122.1	108
Maryland	Ct. per lb.	----- Closed -----		-------- Closed ---------			---
Virginia fire-cured	Ct. per lb.	117.0	112.5	96.5	124.0	88.0	78
Ky.-Tenn. fire-cured	Ct. per lb.	136.4	140.2	Closed	135.2	126.9	89
Ky.-Tenn. dark air-cured	Ct. per lb.	117.2	114.5	113.7	104.0	Closed	106
Virginia sun-cured	Ct. per lb.	104.0	Closed	101.0	100.5	Closed	97
Support price 1/							
Flue-cured	Ct. per lb.	113.8			**121.0		106
Burley	Ct. per lb.	117.3			**124.7		106
Maryland	Ct. per lb.	No support			No support		---
Virginia fire-cured	Ct. per lb.	79.5			** 84.5		106
Ky.-Tenn. fire-cured	Ct. per lb.	79.5			** 84.5		106
Ky.-Tenn. dark air-cured	Ct. per lb.	70.7			** 75.2		106
Virginia sun-cured	Ct. per lb.	70.7			** 75.2		106
Connecticut Valley cigar binder	Ct. per lb.	81.2			** 86.3		106
Wis. binder and Ohio filler	Ct. per lb.	58.6			** 62.3		106
Puerto Rican filler	Ct. per lb.	60.9			** 64.7		106
Parity index 2/	1910-14=100	673	680	690	710	716	105
Industrial production index 3/	1967=100	132.3	133.2	139.6	138.6		105
Employment	Mil.	86.9	87.2	92.6	91.1		105
Personal income 4/	Bil. dol.	1454.3	1447.0	1622.1	1626.4		112
		1976-77		1977-78			
		Dec.	Jan.	Nov.	Dec.	Jan.	
Taxable removals							
Cigarettes	Bil.	43.7	49.0	51.4	42.9		98
Cigars and cigarillos	Mil.	376.9	306.7	406.9	299.0		79
Accumulated from Jan. 1							
Cigarettes	Bil.	617.1		549.1	592.0		96
Cigars and cigarillos	Mil.	5353.3		4545.7	4844.7		90
Invoiced to domestic customers							
Accumulated from Jan. 1							
Smoking tobacco	Mil. lb.	43.7			40.2		92
Chewing tobacco	Mil. lb.	83.9			88.7		106
Snuff	Mil. lb.	25.8			24.4		95
Tax-exempt removals							
Cigarettes	Bil.	6.0	4.9	6.0	6.7		112
Exports	Bil.	6.0	3.8	4.2	7.3		122
Cigars and cigarillos	Mil.	13.0	9.6	8.6	18.2		140
Accumulated from Jan. 1							
Cigarettes	Bil.	72.1		71.4	78.1		108
Exports	Bil.	61.4		59.4	66.7		109
Cigars and cigarillos	Mil.	144.1		112.0	130.3		90
Invoiced for export							
Accumulated from Jan. 1							
Smoking tobacco	Mil. lb.	.9			.7		78
Chewing tobacco	Mil. lb.	.1			.2		200
Wholesale price indexes 5/							
Cigarettes (reg. nonfilter)	1967=100	182.8	182.8	199.4	199.4	199.4	109
Cigars	1967=100	126.6	126.6	133.6	133.6	138.4	109
Smoking tobacco	1967=100	186.3	186.3	197.8	202.1	202.1	108
Plug chewing tobacco	1967=100	194.4	194.4	197.8	206.2	206.2	106
Snuff	1967=100	207.0	209.8	217.9	217.9	NA	---
Consumer price indexes (urban) 6/							
Cigarettes (reg. nonfilter)	1967=100	166.0	167.8	175.9	176.1	176.1	105
Cigarettes (filter tip king)	1967=100	166.4	168.2	175.5	175.7	176.4	105
Cigars (domestic reg. size)	1967=100	132.8	133.2	136.7	137.0	137.8	103
Imports of tobacco							
Cigarette leaf	Mil. lb.	19.2	15.8	16.5	10.3		54
Cigar tobacco 7/	Mil. lb.	9.4	.8	4.2	4.1		44
Accumulated from Jan. 1							
Cigarette leaf	Mil. lb.	204.8		178.0	138.3		92
Cigar tobacco 7/	Mil. lb.	141.8		79.1	33.2		59

See footnotes at end of table.

STATISTICAL SUMMARY--CONTINUED

Item	Unit or base period	1976-1977 Dec.	1976-1977 Jan.	1977-78 Nov.	1977-78 Dec.	1977-78 Jan.	Last data as percentage of a year earlier
Exports of leaf tobacco (farm-sales weight)							
Flue-cured	Mil. lb.	77.2	79.6	55.9	107.0	52.6	66
Burley	Mil. lb.	6.9	4.7	.4	2.9	4.8	102
Maryland	Mil. lb.	.4	0	*	.3	.4	---
Virginia fire- & sun-cured	Mil. lb.	.3	.7	*	.2	.2	28
Ky.-Tenn. fire-cured	Mil. lb.	1.2	.5	1.0	2.2	.3	60
Ky.-Tenn. dark air-cured	Mil. lb.	0	0	0	0	0	---
Black Fat	Mil. lb.	.4	.2	*	.8	.1	50
Cigar wrapper	Mil. lb.	.5	.2	.2	.6	.1	50
Connecticut binder	Mil. lb.	*	*	*	*	0	---
Wisconsin binder	Mil. lb.	*	0	0	.1	0	---
Accumulated from beginning of marketing year 8/							
Flue-cured	Mil. lb.	263.6	343.2	198.9	296.9	349.5	102
Burley	Mil. lb.	14.9	19.6	1.9	4.8	9.6	49
Maryland	Mil. lb.	2.7	2.7	*	.3	.7	26
Virginia fire- & sun-cured	Mil. lb.	1.1	1.8	.2	.4	.6	33
Ky.-Tenn. fire-cured	Mil. lb.	5.5	6.0	1.6	1.6	1.9	32
Ky.-Tenn. dark air-cured	Mil. lb.	0	0	0	0	0	---
Black Fat	Mil. lb.	1.0	1.3	*	.8	.9	69
Cigar wrapper	Mil. lb.	1.9	2.2	.5	1.1	1.2	55
Connecticut binder	Mil. lb.	.1	.1	*	*	*	---
Wisconsin binder	Mil. lb.	*	*	0	.1	.1	---
Cigar filler	Mil. lb.	.1	.1	*	.1	.1	100
Exports of manufactured tobacco in bulk	Mil. lb.	.8	.1	.1	.2		25
Accumulated from Jan. 1	Mil. lb.	13.9		9.6	9.8		71

Item	Unit or base period	Quarterly data 1976-77 Oct.-Dec.	1976-77 Jan.-Mar.	1977-78 Oct.-Dec.	1977-78 Jan.-Mar.	Last data as percentage of a year earlier
Stocks of tobacco--1st of quarter 9/						
Domestic types (farm-sales weight)						
Flue-cured	Mil. lb.	2,468	2,596	2,550	2,574	99
Burley	Mil. lb.	1,131	1,399	1,214	1,558	111
Maryland	Mil. lb.	49	42	49	45	107
Fire-cured	Mil. lb.	50	45	48	42	93
Dark air- and sun-cured	Mil. lb.	30	30	28	31	103
Cigar filler	Mil. lb.	60	55	62	56	102
Cigar binder	Mil. lb.	44	39	44	44	113
Cigar wrapper	Mil. lb.	14	16	14	12	75
Under Government loan 10/	Mil. lb.	533	638	601	763	120
Tobacco sheet 11/						
Cigarette types	Mil. lb.	27.8	29.4	24.6	31.3	106
Cigar types	Mil. lb.	1.5	1.4	1.3	2.8	200
Foreign types (farm-sales weight)						
Cigarette and smoking	Mil. lb.	646	637	602	601	94
Cigar	Mil. lb.	109	114	102	100	88
Tobacco outlets 12/						
Seasonally adjusted data, annual rates, for charts, p.2						
Cigarettes						
Production	Bil.	707.7	668.8	669.2	689.0	103
Tax-paid removals	Bil.	608.7	598.0	606.4	622.0	104
Large cigar production	Bil.	5.50	5.40	5.06	5.13	95
Smoking production	Mil. lb.	39.3	45.4	38.7	40.9	90
Chewing production						
Looseleaf	Mil. lb.	52.9	61.8	59.0	64.9	105
Plug and other	Mil. lb.	28.0	28.7	29.7	29.6	103
Snuff production	Mil. lb.	24.5	24.9	23.2	24.4	98
Exports of leaf						
Total	Mil. lb.	665.5	901.1	569.6	800.0	89
Flue-cured	Mil. lb.	576.0	666.8	495.3	600.0	90

1/ 1977 and 1978 crops respectively. 2/ Prices paid by farmers including interest, taxes and wage rates. 3/ Seasonally adjusted. 4/ Seasonally adjusted, annual rate. 5/ Excise tax excluded. 6/ Federal and applicable State and local taxes included. 7/ Farm-sales weight equivalent. 8/ July 1 for flue-cured and cigar wrapper and October 1 for others. 9/ Holdings of manufacturers and dealers including growers cooperatives. 10/ Reported by grower cooperatives. 11/ Weight of tobacco leaf not including stems added. 12/ Data for most recent quarter are preliminary estimates. * Less than 50,000 pounds. **Estimated.

LIST OF TABLES

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